LJ-97-10

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SOUTHWEST FISHERIES SCIENCE CENTER

NATIONAL MARINE FISHERIES SERVICE SOUTHWEST FISHERIES SCIENCE CENTER P.O. BOX 271 LA JOLLA, CA 92038

AUGUST 1997

CURRENT YEAR OPERATION PLANS FOR FISCAL YEAR 1997

By

Staff of the Southwest Fisheries Science Center

Compiled by D.J. Mackett

LIBRARY

AUG 2 1 1997

National Marine Fisheries Service
2570 Dole Street
Honolulu, Hawaii

ADMINISTRATIVE REPORT LJ-97-10

"This report is used to ensure prompt dissemination of preliminary results, interim reports, and special studies to the scientific community. The material is not ready for formal publication since the paper may later be published in a modified form to include more recent information or research results. Abstracting, citing, or reproduction of this information is not allowed. Contact author if additional information is required."

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

SOUTHWEST FISHERIES SCIENCE CENTER

CURRENT YEAR OPERATING PLANS

FISCAL YEAR 1997

This report presents the FY 1997 Current Year Operating Plans (CYOPs) of the Southwest Fisheries Science Center. Budget summaries for each Task and for each office and laboratory are also presented.

The CYOPs set out the objectives, methodology, resources, activities, events and milestones for each project (Task) that was undertaken by the Center during the fiscal year. In several cases, two or more Tasks may constitute elements of a larger program.

The plans are being published for the record but rather late because of several technical database obstacles and problems encountered in FY 1997.

Tasks financed from "base" funds of the Center are all represented; however, a selected number of important reimbursable or refundable projects are also included in the last section. This year, as last, the Task descriptions and format include a number of items requested as part of the NMFS Management Information System installed to aid the Agency. Most of the output from the MIS file is reproduced here.

The CYOPs are plans and, as such, represent the best estimates that the staff could make at the time of their preparation. The user is cautioned to use the data only as estimates; details of budget or program changes put into effect since the plans were prepared can be obtained from the Center Director.

Also, the information concerning detailed allocations among the budget classes (labor, contracts, travel, etc.) is presented. However, one is cautioned not to use the budget data for any need requiring precise figures about expenditures. If such information is required it also can be obtained from the Center Director.

David J. Mackett, Planning Officer
Southwest Fisheries Science Center
P.O. Box 271
La Jolla, California 92038
August, 1997

NMFS
CURRENT YEAR OPERATING PLAN
FY 1997

FMC: SWC

CYOP REF#	TITLE	TASK LEADER	FTE	AMOUNT ($K)
040	GENERAL SUPPORT - CENTER	NEAL	7.0	1151.2
050	GENERAL SUPPORT - LA JOLLA LAB	NEAL	7.0	908.2
051	SCIENTIFIC SERVICES - LA JOLLA	NEAL	7.0	501.7
052	INFORMATION TECHNOLOGY SERVICES	BISTODEAU	6.0	401.9
054	GRANTS-HAWAIIAN FISHERIES DEVELOPMENT (AQUACULTURE) - O.I.	NEAL	0.0	452.2
055	HAWAII STOCK MANAGEMENT (FY1997) O.I.	NEAL	0.0	474.0
056	PACIFIC TUNA/BILLFISH-JIMAR (FY1997)	NEAL	0.0	1395.0
		Subtotal	**27.0**	**5284.2**
060	SENIOR SCIENTIST	PERRIN	1.0	147.0
		Subtotal	**1.0**	**147.0**
301	COASTAL E. PACIFIC POPULATION BIOLOGICAL FISHES	HUNTER	7.0	493.3
304	FISHERIES ENVIRONMENTAL INVESTIGATIONS	LYNN	4.0	266.4
318	ECOLOGY & SYSTEMATICS OF FISHES	MOSER	5.0	318.9
319	COASTAL & PAC. FISH. RES. INVEST.	CHARTER	6.6	417.9
320	SURVEY SYSTEMS DEV. & EVALUATION	SMITH	3.0	281.8
330	COMM. & REC. FISH. RES. FOR MGMNT.	JACOBSON	3.0	269.1
		Subtotal	**28.6**	**2047.4**
401	LARGE PELAGICS STOCK INVESTIGATION	BARTOO	4.0	467.4
411	MULTISPECIES DATA COLLECTION & EVAL.	COAN	8.0	452.0
421	OCEANIC FISHERIES & EVALUATION	SAKAGAWA	1.18	185.5
		Subtotal	**13.18**	**1104.9**
500	MARINE MAMMAL DIVISION ADMIN.	BROWNELL	2.3	170.8
510	DOLPHIN STOCK ASSESSMENT PROGRAM	GERRODETTE	1.0	92.9
520	POPULATION IDENTIFICATION PROGRAM	DIZON	4.0	275.2
530	CETACEAN ECOLOGY PROGRAM	REILLY	5.0	325.8
540	COASTAL MARINE MAMMAL PROGRAM	BARLOW	3.0	214.6
550	DOLPHIN SAFE TECHNOLOGIES PROGRAM	EDWARDS	2.0	237.5
560	MARINE MAMMAL PHOTOGRAMMETRY	PERRYMAN	3.0	176.2
		Subtotal	**20.3**	**1493.0**
601	ANTARCTIC ECOSYSTEM RESEARCH GROUP	HOLT	7.0	1137.1
		Subtotal	**7.0**	**1137.1**
700	HL LAB DTR'S OFFICE & ADMINISTRATION	LAURS	20.0	1616.7
701	FISHERY MONITORING & ECONOMICS	POOLEY	8.0	445.7
702	FISHERIES MANAGEMENT SCIENCE	WETHERALL	20.0	1400.8
703	PROTECCTED SPECIES - MONK SEALS	GILMARTIN	7.0	474.0
704	MARINE TURTLE RESEARCH	BALAZS	1.0	228.0
		Subtotal	**56.0**	**4165.2**

NMFS
CURRENT YEAR OPERATING PLAN
FY 1997

FMC: SWC

CYOP REF#	TITLE	TASK LEADER	FTE	AMOUNT ($K)
800	TIBURON LABORATORY ADMINISTRATION	MACCALL	4.5	306.3
811	GROUNDFISH ANALYSIS	LENARZ	8.0	648.1
812	GROUNDFISH COMMUNITIES	HOBSON	7.0	441.8
813	GROUNDFISH PHYSIOLOGICAL ECOLOGY	ELDRIDGE	4.0	330.4
821	FISHERY MANAGEMENT ADVISORIES	MACCALL	5.3	520.3
		Subtotal	**28.8**	**2246.9**
901	PACIFIC FISHERIES ENVIRONMENTAL LAB	BOEHLERT	9.65	873.4
		Subtotal	**9.65**	**873.4**
		Total OR&F	**191.53**	**18499.1**

NMFS
CURRENT YEAR OPERATING PLAN
FY 1997

FMC: SWC

CYOP REF#	TITLE	TASK LEADER	FTE	AMOUNT ($K)
	SELECTED REIMBURSABLE OR REFUNDABLE PROJECTS FUNDED BY OTHER AGENCIES			
100	REIMBURSABLE/REFUNDS/ADD-ON FUNDS-CENTER DIRECTOR	TILLMAN	0.0	18.0
130	COASTWATCH/LA JOLLA	HUNTER	0.0	78.7
150	REIMBURSABLE/REFUNDS/ADD-ON FUNDS-MARINE MAMMAL DIVISION	BROWNELL	0.0	168.0
151	ESA RECOVERY - F/PR FUNDS - MARINE MAMMAL DIVISION	BROWNELL	0.0	717.3
152	MMPA-F/PR FUNDS - MARINE MAMMAL DIV	BROWNELL	0.0	338.0
160	AMLR VESSEL SUPPORT	HOLT	0.0	596.0
170	COASTWATCH - HONOLULU	LAURS	0.0	100.2
171	ESA RECOVERY - F/PR FUNDS - HONOLULU	LAURS	0.0	487.7
173	WPACFIN	LAURS	2.5	358.2
180	REIMBURSABLE/REFUNDS/ADD-ON FUNDS - TIBURON	MACCALL	0.0	131.5
181	ESA RECOVERY - F/PR FUNDS - TIBURON	MACCALL	0.5	194.5
190	REIMBURSABLE/REFUNDS/ADD-ON FUNDS - PFEL	BOEHLERT	0.0	74.8
191	ESA RECOVERY - F/PR FUNDS - PFEL	BOEHLERT	0.0	113.1
	TOTAL REIMBURSABLE & REFUNDABLE		***3.00***	***3376.0***

NOAA Marine Fisheries Service
Management Information System
Activity Summary report

ity:	Name:	Org Code:	Activity Type:
)40	General Support - Center	FR2000	BLANK

ILITY / LOCATION

FACILITY	NAME
SWC1	Southwest Fisheries Science Center

)GETED AMOUNTS

LINE ITEM	PHASE	OBJECT CLASS		AMOUNT
8L1A5MDR	DR	26 - Supplies and materials		$67,500
			Sub total for Phase Class:	**$67,500**
			Total for Task:	**$67,500**
8L1AHTDR	DR	26 - Supplies and materials		$8,000
			Sub total for Phase Class:	**$8,000**
			Total for Task:	**$8,000**
8L1ASLDR	DR	26 - Supplies and materials		$200
			Sub total for Phase Class:	**$200**
			Total for Task:	**$200**
8L2ASMDR	DR	26 - Supplies and materials		$21,200
			Sub total for Phase Class:	**$21,200**
			Total for Task:	**$21,200**
8L2B1P95	95	11 - Personnel compensation (labor)		$25,800
			Sub total for Phase Class:	**$25,800**
			Total for Task:	**$25,800**
8L2B1PDR	DR	26 - Supplies and materials		$30,800
			Sub total for Phase Class:	**$30,800**
			Total for Task:	**$30,800**
8L2BBADR	DR	26 - Supplies and materials		$4,500
			Sub total for Phase Class:	**$4,500**
			Total for Task:	**$4,500**
8L2BERDR	DR	26 - Supplies and materials		$85,700
			Sub total for Phase Class:	**$85,700**
			Total for Task:	**$85,700**
8L2BN1DR	DR	21 - Travel, transportation of persons		$20,400

8L2BN1DR	DR	26 - Supplies and materials		$12,900
			Sub total for Phase Class:	**$33,300**
			Total for Task:	**$33,300**
8L2BRSDR	DR	25 - Contracts, contractual services		$171,300
			Sub total for Phase Class:	**$171,300**
			Total for Task:	**$171,300**
8N2BRSDR	DR	26 - Supplies and materials		$17,600
			Sub total for Phase Class:	**$17,600**
			Total for Task:	**$17,600**
8N3AG1DR	DR	26 - Supplies and materials		$10,200
			Sub total for Phase Class:	**$10,200**
			Total for Task:	**$10,200**
9WGN4001	01	11 - Personnel compensation (labor)		$491,900
9WGN4001	01	12 - Personnel benefits		$105,900
9WGN4001	01	21 - Travel, transportation of persons		$47,800
9WGN4001	01	22 - Transportation of things		$1,000
9WGN4001	01	23 - Rent, utilities, telecommunications		$4,600
9WGN4001	01	24 - Printing, reproduction		$1,700
9WGN4001	01	25 - Contracts, contractual services		$7,700
9WGN4001	01	26 - Supplies and materials		$7,000
9WGN4001	01	31 - Equipment, capitalized & noncap.		$7,500
			Sub total for Phase Class:	**$675,100**
			Total for Task:	**$675,100**
			Total for Activity:	**$1,151,200**

SIGNED STAFFING

NMFS POS_ID	NMFS EMPLOYEE OR VACANT POSITION	PERCENT
1584	HOSTLER, VIRGINIA	100.00%
1929	LA ROCHE, NANCY	100.00%
2422	MACKETT, DAVID	100.00%
0050	NEAL, RICHARD	100.00%
1271	RASMUSSEN, SHERRIE	100.00%
1005	TILLMAN, MICHAEL	100.00%
0667	TROIAN, ROSEMARY	100.00%
	Total for Activity:	**7 FTE's**

NOAA Marine Fisheries Service
Management Information System
Activity Summary report

ivity:	Name:	Org Code:	Activity Type:
VC050	General Support - La Jolla Laboratory	FR2100	Programmatic Activity

CILITY / LOCATION

FACILITY	NAME
SWC1	Southwest Fisheries Science Center

DGETED AMOUNTS

LINE ITEM	PHASE	OBJECT CLASS		AMOUNT
8L1A1ATT	TT	23 - Rent, utilities, telecommunications		$21,800
8L1A1ATT	TT	25 - Contracts, contractual services		$32,200
			Sub total for Phase Class:	**$54,000**
			Total for Task:	**$54,000**
8L1C1AUN	UN	12 - Personnel benefits		$50,000
			Sub total for Phase Class:	**$50,000**
			Total for Task:	**$50,000**
9WGN4005	05	11 - Personnel compensation (labor)		$181,100
9WGN4005	05	12 - Personnel benefits		$39,600
9WGN4005	05	21 - Travel, transportation of persons		$9,400
9WGN4005	05	22 - Transportation of things		$15,500
9WGN4005	05	23 - Rent, utilities, telecommunications		$31,000
9WGN4005	05	24 - Printing, reproduction		$500
9WGN4005	05	25 - Contracts, contractual services		$18,300
9WGN4005	05	26 - Supplies and materials		$43,500
9WGN4005	05	31 - Equipment, capitalized & noncap.		$13,700
			Sub total for Phase Class:	**$352,600**
			Total for Task:	**$352,600**
9WGN4006	06	11 - Personnel compensation (labor)		$79,300
9WGN4006	06	12 - Personnel benefits		$17,200
9WGN4006	06	21 - Travel, transportation of persons		$5,000
9WGN4006	06	23 - Rent, utilities, telecommunications		$112,000
9WGN4006	06	25 - Contracts, contractual services		$165,600
9WGN4006	06	26 - Supplies and materials		$35,000
9WGN4006	06	31 - Equipment, capitalized & noncap.		$1,500
			Sub total for Phase Class:	**$415,600**
			Total for Task:	**$415,600**
9WGN4007	07	21 - Travel, transportation of persons		$4,000
9WGN4007	07	25 - Contracts, contractual services		$23,000
			Sub total for Phase Class:	**$27,000**

			Total for Task:	$27,000
9WGN4008	08	25 - Contracts, contractual services		$1,000
9WGN4008	08	26 - Supplies and materials		$2,000
9WGN4008	08	41 - Grants, subsidies		$6,000
			Sub total for Phase Class:	$9,000
			Total for Task:	$9,000
			Total for Activity:	$908,200

SIGNED STAFFING

NMFS POS_ID	NMFS EMPLOYEE OR VACANT POSITION	PERCENT
1928	ENGSTRAND, BARBARA	100.00%
1156	HOLDER, PATRICIA	100.00%
1908	KROM, STANLEY	100.00%
0790	MARROW, MERLE	100.00%
1238	WATKINS, BARBARA	100.00%
1866	WHYTE, RONALD	100.00%
	PEREZ, E.	100.00%
	Total for Activity:	~~5 FTEs~~ 4 FTEs

WC050

Problem Statement

ADMINISTRATIVE SUPPORT SERVICES

Center management and La Jolla Support.

1B. Objectives (What are the major objectives being pursued by this CYOP?)

a) To provide administrative services, to the laboratory staff, required to support management and research on a daily basis.

b) To provide administrative services to tenant agencies at the Southwest Fisheries Science Center.

HUMAN RESOURCES/DIVERSITY

Workforce diversity and recognition.

1B. Objectives (What are the major objectives being pursued by this CYOP?)

a) To support scientific staff thru Work Study Program.

b) To support diversity activities through FWP and Science Sisters program and reward employees through EOQ program.

Methodology

ADMINISTRATIVE SUPPORT SERVICES

Necessary administrative services are provided by keeping apprised of governing laws and regulations of OMB, GPO, GAO, Comptroller General Decisions, Federal Property Management Regulations, Federal Acquisition Regulations, Federal Travel Regulations, Federal Pay and Leave Administration and various departmental, agency and regional directives.

Justification

ADMINISTRATIVE SUPPORT SERVICES

Administration support related to day to day operation of facilities and services to the SWFSC.

HUMAN RESOURCES/DIVERSITY

Support of EEO/Human Resources activities.

VC050

Linkages

ADMINISTRATIVE SUPPORT SERVICES

Direct coordination with other task leaders within CYOP and other laboratories administrative services groups. Other linkages through support services provided to CA DFG, IATTC, NESDIS, and NOS.

HUMAN RESOURCES/DIVERSITY

Direct coordination and linkage with La Jolla program specialists.

Contracts

ADMINISTRATIVE SUPPORT SERVICES

Only 5% of the administrative support groups total budget is allocated to contract costs. One 10K contract for budget consulting and training, the others are very small equipment repair and preventative maintenance contracts.

HUMAN RESOURCES/DIVERSITY

Contract with UCSD for Work Study Program.

Products/Services

Timely and accurate processing of all administrative services.

Clients

ADMINISTRATIVE SUPPORT SERVICES

All divisions of the SWFSC and tenant groups are provided with administrative services provided by this support group.

HUMAN RESOURCES/DIVERSITY

All La Jolla employees.

NOAA Marine Fisheries Service
Management Information System
Activity Summary report

vity:	Name:	Org Code:	Activity Type:
7C051	Scientific Services - La Jolla	FR2100	Programmatic Activity

CILITY / LOCATION

FACILITY	NAME
SWC1	Southwest Fisheries Science Center

DGETED AMOUNTS

LINE ITEM	PHASE	OBJECT CLASS		AMOUNT
8L1C1AM2	M2	11 - Personnel compensation (labor)		$43,400
8L1C1AM2	M2	12 - Personnel benefits		$9,600
8L1C1AM2	M2	21 - Travel, transportation of persons		$2,500
8L1C1AM2	M2	22 - Transportation of things		$200
8L1C1AM2	M2	23 - Rent, utilities, telecommunications		$4,600
8L1C1AM2	M2	24 - Printing, reproduction		$6,000
8L1C1AM2	M2	25 - Contracts, contractual services		$26,800
8L1C1AM2	M2	26 - Supplies and materials		$60,500
			Sub total for Phase Class:	**$153,600**
			Total for Task:	**$153,600**
8L1C1AM3	M3	11 - Personnel compensation (labor)		$113,600
8L1C1AM3	M3	12 - Personnel benefits		$25,000
8L1C1AM3	M3	21 - Travel, transportation of persons		$5,900
8L1C1AM3	M3	22 - Transportation of things		$100
8L1C1AM3	M3	24 - Printing, reproduction		$900
8L1C1AM3	M3	25 - Contracts, contractual services		$10,800
8L1C1AM3	M3	26 - Supplies and materials		$1,100
8L1C1AM3	M3	31 - Equipment, capitalized & noncap.		$1,200
			Sub total for Phase Class:	**$158,600**
			Total for Task:	**$158,600**
8L1C1AM4	M4	11 - Personnel compensation (labor)		$139,000
8L1C1AM4	M4	12 - Personnel benefits		$30,500
8L1C1AM4	M4	24 - Printing, reproduction		$9,000
8L1C1AM4	M4	25 - Contracts, contractual services		$1,000
8L1C1AM4	M4	26 - Supplies and materials		$6,500
8L1C1AM4	M4	31 - Equipment, capitalized & noncap.		$3,500
			Sub total for Phase Class:	**$189,500**
			Total for Task:	**$189,500**
			Total for Activity:	**$501,700**

D

	PERCENT
Pacific coast and Alaska pelagic fisheries	25.00%
Western Pacific invertebrate fisheries	25.00%
Western Pacific bottomfish and armorhead fisheries	25.00%
Pacific highly migratory pelagic fisheries	25.00%

SOCIATED LEGISLATION

	PERCENT
Endangered Species act	
Magnuson act	
Marine Mammal Protection act	

SOCIATED AGENCIES

HQ	NMFS Headquarters
SWC1	Southwest Fisheries Science Center
SWC2	Honolulu Lab
SWC3	Tiburon Lab
SWC4	Monterey Lab
SWR	Southwest Regional Office

SIGNED STAFFING

NMFS POS_ID	NMFS EMPLOYEE OR VACANT POSITION	PERCENT
0394	ALLEN, ROY	100.00%
0204	LOSEY, DEBRA	100.00%
1996	ORR, HENRY	100.00%
1907	RAYMOND, KENNETH	100.00%
0078	RODRIGUEZ, MARYANN	100.00%
0544	SMITH, SUSAN	100.00%
	VACANT	100.00%

Total for Activity: 8 FTE's
7

C051

roblem Statement

Editorial Services

To educate and gain more positive public support, NMFS needs to communicate its research findings in clearly-presented, non-technical terms to reach the largest possible audience about U.S. fishery resource and protected species problems, NMFS proposed solutions to these problems, and the scientific rationale for arriving at these solutions.This CYOP addresses the need for maintaining effective external communications with constituents and the public concerning the agency's mission, program activities, research results and accomplishments. It also addresses management's need for maintaining effective internal communications and tracking progress of research milestones within the Center.

1B. Objectives (What are the major objectives being pursued by this CYOP?)

a) To provide constituents with accurate, timely, and clearly presented information on research results and activities carried out by NMFS' Southwest Fisheries Science Center and Southwest Region, and foster good relations with the public and press;

b) To provide staff support to the Center Director in tracking and reporting on progress of CYOP milestones and in maintaining effective in-house communication among Center laboratories; and

c) To ensure that SWC publications meet established editorial standards.

La Jolla Library

The SWFSC Library provides professional scientific and technical information services and document delivery to center staff in support of the mission and programs of SWFSC and NMFS.

1B. Objectives (What are the major objectives being pursued by this CYOP?)

a) To maintain a modern research library specializing in bibliographic materials in fisheries, fish biology, marine mammals, the marine environment and the management of marine resources, and to enable their use by center staff, affiliates, and various publics;

b) To establish and maintain links with federal, state, university, and international information centers in order to secure information on subjects of concern to center staff and other constituents;

c) To archive and provide access to publications of SWFSC authors.

Illustrative Services

Supports publication and graphic needs of Center-wide and Regional programs/research.

1B. Objectives (What are the major objectives being pursued by this CYOP?)

a) To support Center/Region publication requirements

b) To support Center/Region graphic and visual needs

C051

c) To support Center/Region photographic and Audio-Visual demands

Methodology

Editorial Services

Public informational materials, including brochures and media release are issued on a regular basis and regular contact is maintained with members of the local news media; a homepage is updated regularly for World Wide Web users; educational events are coordinated; Center program milestones are tracked and Director's SES Performance Plan prepared; Center documents are edited and prepared for publication including scientific manuscripts and special briefing documents and reports; Weekly Staff Meeting Minutes, Quarterly Report of Activities, and Director's Information Brief are assembled, edited, and prepared for publication.

La Jolla Library

Library services and primary functions include: Reference, Referral & Interlibrary Loan; Online & CD-ROM Database Searching; Acquistions, Cataloging, Circulation & Maintenance of the Library Collection.

The Library is a participating member in federal, national, and international networks, and has long-standing exchange agreements worldwide. The Library maintains an archive of published material by the SWFSC staff, and maintains computerized indexes to published papers and internal reports.

Illustrative Services

To maximize value through efficient utilization of computer graphics. Specifically-- 1)use computer to produce maps or graphics digitally on film or paper, B&W or color, for publication or visual presentation. 2) Use electronic publishing programs to produce Center Newsletters, Technical Memorandums, Administrative Reports, and other documents (such as -- Directors Report to the Tuna Conference, etc...) 3) To maintain high quality with existing staff.

C051

c) To support Center/Region photographic and Audio-Visual demands

lethodology

Editorial Services

Public informational materials, including brochures and media release are issued on a regular basis and regular contact is maintained with members of the local news media; a homepage is updated regularly for World Wide Web users; educational events are coordinated; Center program milestones are tracked and Director's SES Performance Plan prepared; Center documents are edited and prepared for publication including scientific manuscripts and special briefing documents and reports; Weekly Staff Meeting Minutes, Quarterly Report of Activities, and Director's Information Brief are assembled, edited, and prepared for publication.

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C051

ustification

Editorial Services

Maintaining good public and constitutent relations and providing effective information products has long been stressed within the agency, but most recently, as a result of the Management and Organization Review, "Agency Image and External Communications" was selected as one of nine charter areas in need for agency change/improvement, mandated by the National Performance Review with the expressed support of NOAA and the Department of Commerce. Much of the public affairs work and planning during FY 97 will involve participation on the NMFS-appointed Public Affairs Tiger Team, to implement certain Image and External Communications charter team recommendation, and as Acting Public Affairs Officer for the Southwest Region.

La Jolla Library - The Library provides services and systems for the procurement, cataloging, storage and retrieval of information required by scientific and administrative staff to fulfill the NMFS mission.

Priorities are based on need and on time constraints.

Illustrative Services

*All plans/mandates/authorities indirectly benefit by the support and service given by this CYOP

*Priorities based on need and relative significance. Any conflicts are resolved.

*Centralized Illustrative Services support reduces costs to the Center and Region.

C051

inkages

Editorial Services

This CYOP coordinates public affairs, editorial and program tracking activities with all SWC laboratories (F/SWC1, F/SWC2, F/SWC3, F/SWC4) and divisions, and closely with the Southwest Regional Office in Long Beach, CA. It also cooperates regularly with NMFS/NOAA headquarters, especially EA5-NOAA Office of External Affairs assigned to NMFS, and the NMFS Interim Tiger Shark Team for Public Affairs.

La Jolla Library - This CYOP provides library services primarily to F/SWC1 staff, and also extends its services to the Inter-American Tropical Tuna Commission (IATTC) staff at F/SWC1 site.

Librarians at F/SWC1, F/SWC2, and F/SWC3 often cooperate in providing assistance and/or information upon request to each other, and to the F/SWC4 and SWR staffs.

Participation in the NOAA Library Network and other library networks creates linkages to many agencies and institutions at regional, national, and international levels.

This CYOP budget is funded by SWFSC Administration.

Illustrative Services

SWFSC and SWR elements all share useage. Budget funded by SWFSC Administration.

Contracts

Editoriall Services

Contract for editing and processing manuscripts - $10.8K.

La Jolla Library

Librarian Technician Services Contract (23.8K est .75% FY 97) 1/15/97
EBSCO Journal Vendor (46K)

Illustrative Services

N.A.

C051

roducts/Services

Editorial Services

SWFSC Quarterly Report of Activities, Director's Information Brief, Director's Report to the Annual Tuna Conference, SWFSC descriptive brochures, SWFSC Homepage, special briefing documents, regular press releases on Center activities.

La Jolla Library

Bibliographic products are produced from Online Computer Databases, from CD-ROM, and from university and Internet information networks; "FYI" Newsletter is published irregularly to inform staff of library activities and concerns; Bibliographic lists are generated of SWFSC and SWR research, published and unpublished, by subject or author, using in-house databases.

Illustrative Services

Computer slides, overhead transparencies, video and audio support, photographic support, display and exhibit creation and representation, poster session creation, answer public requests for file films, publication/brochure design and layout, printing negotiation and instructions to GPO or private contractors.

Clients

Editorial Services

Representatives from the media receive press releases and are contacted about Center activities which may be of interest to their readers/viewers; various NMFS constituents, Congressional Staff and others within NOAA and NMFS regularly recieve the Center's Quarterly Report and Annual Report to the Tuna Conference; the general public, school teachers, students, World Wide Web users, and civic groups benefit from public information activities, and NMFS Headquarters staff are provided selected briefing materials on request. Within the Center, editorial guidance and standards are provided to staff scientists, and all SWC personnel are clients in recieving information on Center research and personnel activities through the Director's Information Brief and Staff Meeting Minutes.

La Jolla Library

SWFSC staff, SWR staff, and IATTC staff are primary clients. General public, fishermen and fishing industry representatives, other federal and international agency staff, SIO and University students and faculty, grade school teachers, visiting scientists and lecturers.

Illustrative Services

All Divisions/Groups/Laboratories of the SWFSC and many elements of the SWR. The public and commercial businesses use our publications and photographs.

SOUTHWEST FISHERIES SCIENCE CENTER
CURRENT YEAR OPERATING PLAN - FORM 5
FY 1997

CYOP Number: SWC -051 **Lab/Div:** SCIENTIFIC SERVICES

Title: LA JOLLA LIBRARY

Leader: LOSEY

MILESTONES, EVENTS AND ACTIVITIES SECTION

(For each Task # indicate M = Milestone, E = Event, A = Activity, Sequence #, Description of the Activity, Event or Milestone and the approximate dates of starting and finishing an Activity. Milestone and event dates should be indicated in the date finish column. Use additional pages if required.)

Task #	MEA	Seq #	Major Milestone, Event or Activity Description	Date Start	Date Finish
8L1C1AM2	M	1	Bibliography of Tech. Memos and Adm. Reports of SWFSC & SWR, with author and subject indexes (to be published as SWFSC Adm. Rep. LJ-96-16)		DEC 96

NOAA Marine Fisheries Service
Management Information System
Activity Summary report

ty:	Name:	Org Code:	Activity Type:
2052	Information Technology Services	FR2100	Programmatic Activity

LITY / LOCATION

FACILITY	NAME
SWC1	Southwest Fisheries Science Center

GETED AMOUNTS

LINE ITEM	PHASE	OBJECT CLASS		AMOUNT
8L1C1A02	02	11 - Personnel compensation (labor)		$223,700
8L1C1A02	02	12 - Personnel benefits		$49,200
8L1C1A02	02	21 - Travel, transportation of persons		$6,000
8L1C1A02	02	22 - Transportation of things		$500
8L1C1A02	02	24 - Printing, reproduction		$500
8L1C1A02	02	25 - Contracts, contractual services		$20,600
8L1C1A02	02	26 - Supplies and materials		$21,500
8L1C1A02	02	31 - Equipment, capitalized & noncap.		$22,700
			Sub total for Phase Class:	**$344,700**
			Total for Task:	**$344,700**
8L1C1C03	03	11 - Personnel compensation (labor)		$46,900
8L1C1C03	03	12 - Personnel benefits		$10,300
			Sub total for Phase Class:	**$57,200**
			Total for Task:	**$57,200**
			Total for Activity:	**$401,900**

SIGNED STAFFING

NMFS POS_ID	NMFS EMPLOYEE OR VACANT POSITION	PERCENT
1861	BISTODEAU, ROBERT	100.00%
1434	BONES, MATTHEW	100.00%
1978	JACOBSON, SUSAN	100.00%
0739	RALSTON, FRANK	100.00%
0467	VU, THANH HUYEN	100.00%
	COSGROVE, RICHARD	100.00%
	Total for Activity:	~~5 FTE's~~ 6 FTEs

NOAA Marine Fisheries Service
Management Information System
Activity Narratives Report

'C052

'roblem Statement

This CYOP provides computer support, operations, and development for NMFS customers.

1B. Objectives (What are the major objectives being pursued by this CYOP?)

a) To provide computer related support, operations, and development for hardware, software, and communication systems for all customers.

b) To coordinate computer related activities regions-wide.

c) To coordinate computer related activities nation-wide.

Methodology

A total team approach along with continuous self and formal training is used to provide a wide range of computer services in the most timely manner. Team members rely on each other for their individual expertise, advise, and experience.

Justification

The need for reliable and efficient use of computers for day to day operations as well as the need for computing resources to perform the work to meet the organizations mission.

Linkages

All divisions, laboratories, regions, and affiliated organizations in NOAA. Tied into the IT-95 budget for staffing and IT-95 operations and maintenance.

Contracts

Less than 5% of the budget is for contracts: phone system, LAN, printer maintenance, and training services.

Products/Services

Computer related strategic planning, Local Area Network, Wide Area Network, and Internet operationss, telecom management, AIMS management, hardware installation and repair, Coastal Division half FTE support, IT-95 and Oracle database administration, regional and national information technology coordination, on-call customer support and consulting services, Cogniscope meeting computer support.

Clients

Clients consist of all division, laboratory, building tenants and other NMFS region and HQ staff.

SOUTHWEST FISHERIES SCIENCE CENTER
CURRENT YEAR OPERATING PLAN - FORM 5
FY 1997

CYOP Number: SWC - 052 **Lab/Div:** La Jolla **Page:** 1

Title: Information Technology Services

Leader: Bistodeau

MILESTONES, EVENTS AND ACTIVITIES SECTION

(For each Task # indicate M = Milestone, E = Event, A = Activity, Sequence #, Description of the Activity, Event or Milestone and the approximate dates of starting and finishing an Activity. Milestone and event dates should be indicated in the date finish column. Use additional pages if required.)

Task #	MEA	Seq #	Major Milestone, Event or Activity Descripition	Date Start	Date Finish
8L1C1A02	A	1	Provide IT related planning and coordination	10/96	9/97
8L1C1A02	A	2	Provide general computer spport/consulting	10/96	9/97
8L1C1A02	A	3	Manage Local Arwa Network operations	10/96	9/97
8L1C1A02	A	4	Manage Wide Area Network operations	10/96	9/97
8L1C1A02	A	5	Manage telecommunication systems	10/96	9/97
8L1C1A02	A	6	Maintain and develop administrative systems	10/96	9/97
8L1C1A02	A	7	Provide equipment/hardware installation/repair	10/96	9/97
8L1C1A02	A	8	Manage IT-95 computer systems, contract, budget	10/96	9/97
8L1C1A02	A	10	Provide Cogniscope computer support	10/96	9/97
8L1C1A02	A	11	Participate in NMFS System Architecture project	10/96	9/97
8L1C1A02	E	12	Complete implementation of Group Conference sys	10/96	2/97
8L1C1A02	E	13	Upgrade LAN file servers to NT 4.0	4/97	4/97

8L1C1A02	E	15	Migrate SGIs to IRIX 6.2 and Oracle 7.3.2	1/97	6/97
8L1C1A02	E	16	Coordinate division homepage development	2/97	6/97
8L1C1A02	E	17	Develop GIS expertise and facilitate use	12/96	9/97
8L1C1A02	E	18	Develop homepage programming expertise	1/97	9/97
8L1C1A02	E	19	Develop ITS Help Desk application	3/97	9/97
8L1C1A02	E	20	Develop multi-media CBT library	1/97	4/97
8L1A1A03	A	1	Provide half FTE Coastal Division Support	10/96	9/97
8L1A1A03	A	2	Provide Oracle Database consulting	10/96	9/97
8L1A1A03	A	3	Evaluate/support database/tool migration	10/96	9/97
8L1A1A03	E	4	Upgrade SUN workstation RAM	2/97	2/97
8L1A1A03	A	5	Evaluate PFRD "Enterprise" database w/CFRD data	10/96	3/97

NOAA Marine Fisheries Service
Management Information System
Activity Summary report

y:	Name:	Org Code:	Activity Type:
'054	Grants-Hawaiian Fisheries Development (Aquaculture) - O.I.	FR2000	Programmatic Activity

LITY / LOCATION

FACILITY	NAME
SWC1	Southwest Fisheries Science Center

GETED AMOUNTS

LINE ITEM	PHASE	OBJECT CLASS	AMOUNT
8L3BA1PA	PA	41 - Grants, subsidies	$452,200
		Sub total for Phase Class:	$452,200
		Total for Task:	$452,200
		Total for Activity:	$452,200

NOAA Marine Fisheries Service
Management Information System
Activity Narratives Report

C054

roblem Statement

New methods of rearing large pelagic marine species are needed to make aquaculture profitable in the tropics.

lethodology

Methods of rearing blue travally in captivity are tested with economical production as a goal.

ustification

New species of marine fish may be better suited for aquaculture than those currently reared.

inkages

Foreign (Japanese) and U.S. technology from widely scattered marine aquacultural research stations is applied on this project.

roducts/Services

Results will be widely distributed.

lients

Marine aquaculturists worldwide.

NOAA Marine Fisheries Service
Management Information System
Activity Summary report

	Name:	Org Code:	Activity Type:
055	Hawaii Stock Management (FY19[redacted]97) - O.I.	FR2000	BLANK

GETED AMOUNTS

LINE ITEM	PHASE	OBJECT CLASS	AMOUNT
8L1A1CPA	PA	41 - Grants, subsidies	$474,000
		Sub total for Phase Class:	$474,000
		Total for Task:	$474,000
		Total for Activity:	$474,000

:055

oblem Statement

Testing the viability of marine stocking (enhancement) programs in terms of survival, growth and economic benefits.

ethodology

Cultured mullet and threadfin are stocked into the natural environment to quantify survival and growth rates across time, stocking size, season, location and other parameters controlled by the stocking agency.

ıstification

Model species are reared in captivity then released into the marine environment to test the applicability and value of marine fisheries enhancement.

inkages

Program makes use of a broad spectrum of aquacultural research conducted at other institutions. Data are openly available, published and exchanged.

ontracts

None. This is a grant to O.I.

roducts/Services

Data on results of stocking experiments are widely available.

lients

Marine fisheries managers and aquaculturists in tropical countries and specifically in Hawaii.

NOAA Marine Fisheries Service
Management Information System
Activity Summary report

y:	Name:	Org Code:	Activity Type:
056	PACIFIC TUNA/BILLFISH - JIMAR (FY1997)	FR2000	BLANK

LITY / LOCATION

FACILITY	NAME
SWC1	Southwest Fisheries Science Center

GETED AMOUNTS

LINE ITEM	PHASE	OBJECT CLASS	AMOUNT
8L2APTPA	PA	41 - Grants, subsidies	$1,395,000
		Sub total for Phase Class:	**$1,395,000**
		Total for Task:	**$1,395,000**
		Total for Activity:	**$1,395,000**

OCIATED AGENCIES

SWC1	Southwest Fisheries Science Center

NOAA Marine Fisheries Service
Management Information System
Activity Narratives Report

2056

Problem Statement

Large pelagic fish species are heavily harvested by international fleets, yet the acceptable, sustainable levels of harvest are unknown for most species. Increasing fishing intensity is expected to develop in upcoming years, putting some species at risk of overfishing.

Methodology

A wide range of biological studies of large pelagic billfish, sharks and other species will be conducted, including population dynamics, stock assessment and basic biological studies will be conducted.

Justification

Inadequate knowledge exists to manage large pelagics effectively in the tropics.

Linkages

Other universities, NMFS and international research agencies will cooperate actively and share useful data.

Products/Services

Research publications will be used to convey results to user groups.

Clients

Fishery managers and consumers of fishery products throughout the tropics.

Senior Scientist

NOAA Marine Fisheries Service
Management Information System
Activity Summary report

y:	Name:	Org Code:	Activity Type:
060	Senior Scientist	FR2100	Programmatic Activity

LITY / LOCATION

FACILITY	NAME
SWC1	Southwest Fisheries Science Center

GETED AMOUNTS

LINE ITEM	PHASE	OBJECT CLASS	AMOUNT
8L1APRP1	P1	11 - Personnel compensation (labor)	$98,100
8L1APRP1	P1	12 - Personnel benefits	$21,500
8L1APRP1	P1	21 - Travel, transportation of persons	$5,000
8L1APRP1	P1	25 - Contracts, contractual services	$15,000
8L1APRP1	P1	26 - Supplies and materials	$3,400
8L1APRP1	P1	31 - Equipment, capitalized & noncap.	$4,000
		Sub total for Phase Class:	**$147,000**
		Total for Task:	**$147,000**
		Total for Activity:	**$147,000**

)

	PERCENT
Pacific highly migratory pelagic fisheries	50.00%
Atlantic marine mammals	25.00%
Pacific marine mammals	25.00%

?

	PERCENT
All FMPs combined	75.00%
Coastal Migratory Pelagics	10.00%
Western Pacific Pelagics	15.00%

SOCIATED LEGISLATION

	PERCENT
Marine Mammal Protection act	

SOCIATED AGENCIES

CMC	Center for Marine Conservation
DOC	Department of Commerce
IATTC	Inter-American Tropical Tuna Commission
SWR	Southwest Regional Office

NOAA Marine Fisheries Service
Management Information System
Activity Summary report

GNED STAFFING

NMFS POS_ID	NMFS EMPLOYEE OR VACANT POSITION	PERCENT
1895	PERRIN, WILLIAM	100.00%

Total for Activity: 1 FTE's

NOAA Marine Fisheries Service
Management Information System
Activity Narratives Report

C060

roblem Statement

What are the species and stocks of cetaceans worldwide and how do they interact with fisheries?

1B. Objectives (What are the major objectives being pursued by this CYOP?)

a) To delineate stocks of cetaceans.

b) To investigate taxonomic relationships of cetaceans.

c) To foster national and international collaboration on problems of marine mammal assessment and management.

Methodology

Molecular genetics and morphological studies are used to investigate relationships among species and stocks.

Justification

MMPA; by agreement of scientific community and the regions, stock identity is of crucial importance in assessment and management of marine mammal resources.

Linkages

Other CYOPs at SWC1 (Marine Mammals).

Contracts

1. Investigate genetics of Dall's porpoise - $5.0K
2. Investigate genetics of spinner dolphin - $5.0K
3. Update Papyrus files and produce user manual - $5.0K

Products/Services

Technical publications; international workshops to transfer expertise.

Clients

SWR, CMS, IWC Scientific Committee, general marine mammal scientific community.

SOUTHWEST FISHERIES SCIENCE CENTER
CURRENT YEAR OPERATING PLAN - FORM 5
FY 1997

CYOP Number: SWC - S060 **Lab/Div:** SWC/Sr.Sci

Title: Senior Scientist

Leader: W. Perrin

MILESTONES, EVENTS AND ACTIVITIES SECTION

(For each Task # indicate M = Milestone, E = Event, A = Activity, Sequence #, Description of the Activity, Event or Milestone and the approximate dates of starting and finishing an Activity. Milestone and event dates should be indicated in the date finish column. Use additional pages if required.)

Task #	MEA	Seq #	Major Milestone, Event or Activity Descripition	Date Start	Date Finish
8L1APRP1	E	1	Edit Marine Mammal Science	Oct.	Sep.
8L1APRP1	M	2	Complete chapter for MMC book	Jan.	Jan.
8L1APRP1	E	3	Participate in meeting of Bonn Convention	Apr.	Apr.
8L1APRP1	M	4	Participate in meeting IWC S.C.	Sep.	Sep.

Coastal Fisheries Resources Division

NOAA Marine Fisheries Service
Management Information System
Activity Summary report

/:	Name:	Org Code:	Activity Type:
301	Coastal E. Pacific Population Biological Fishes	FR2100	Programmatic Activity

ITY / LOCATION

FACILITY	NAME
SWC1	Southwest Fisheries Science Center

GETED AMOUNTS

LINE ITEM	PHASE	OBJECT CLASS	AMOUNT
8L1A3A30	30	11 - Personnel compensation (labor)	$164,600
8L1A3A30	30	12 - Personnel benefits	$36,200
8L1A3A30	30	21 - Travel, transportation of persons	$2,000
8L1A3A30	30	23 - Rent, utilities, telecommunications	$24,000
8L1A3A30	30	25 - Contracts, contractual services	$10,000
8L1A3A30	30	26 - Supplies and materials	$1,000
8L1A3A30	30	31 - Equipment, capitalized & noncap.	$15,000
8L1A3A30	30	41 - Grants, subsidies	$12,000
		Sub total for Phase Class:	**$264,800**
		Total for Task:	**$264,800**
8L1A3A31	31	11 - Personnel compensation (labor)	$171,100
8L1A3A31	31	12 - Personnel benefits	$37,700
8L1A3A31	31	21 - Travel, transportation of persons	$1,000
8L1A3A31	31	26 - Supplies and materials	$18,000
8L1A3A31	31	41 - Grants, subsidies	$700
		Sub total for Phase Class:	**$228,500**
		Total for Task:	**$228,500**
		Total for Activity:	**$493,300**

D

	PERCENT
Pacific coast salmon fisheries	20.00%
Pacific coast and Alaska pelagic fisheries	38.00%
Pacific coast groundfish fisheries	40.00%
Nearshore fisheries	2.00%

P

	PERCENT
Commercial and Recreational Salmon	20.00%
Northern Anchovy	10.00%
Pacific Coast Groundfish	70.00%

OCIATED LEGISLATION

	PERCENT
Anadromous Fisheries act	
Endangered Species act	
Magnuson act	

N/A

A OBJECTIVES

		PERCENT
001	Assess the status of fishery resources	38.00%
002	Advance Fishery predictions	38.00%
003	Manage for economic growth	2.00%

OCIATED AGENCIES

CA_DFG	California Department of Fish and Game
HQ	NMFS Headquarters
PFMC	Pacific Fishery Management Council
SWR	Southwest Regional Office

IGNED STAFFING

NMFS POS_ID	NMFS EMPLOYEE OR VACANT POSITION	PERCENT
1969	FOSTER, DIANE	100.00%
1091	HUNTER, JOHN	100.00%
0234	KIMBRELL, CAROL	100.00%
2386	LYNN, ERIC	100.00%
1342	MACEWICZ, BEVERLY	100.00%
1428	ROBERTSON, LAWRENCE	100.00%
2099	VETTER, RUSSELL	100.00%

Total for Activity: 7 FTE's

301

oblem Statement

The central mission of this task is to provide information needed to estimate abundance, and assess the vulnerability of stocks of the California Current system to fishing and environmental change. In an upwelling system such as the California Current, environmentally induced changes such as El Nino events are recognized as a key element in assessing the sensitivity of stocks to fishing. A key goal of the task is to provide advise regarding which factors influencing a fishery are amenable to management, and which are determined by natural forces.

The task is a world leader in fishery science on small pelagic fishes and transfers technology developed in CFRD to Mexico and other developing countries through workshops, internships, scientific exchanges, and leadership in international programs such as GLOBEC and PICES. The task is also involved in coordinating joint research projects and surveys with Mexico through such programs as CalCOFI and Mexus Pacifico.

The task is dedicated to improving quality and reducing the costs of the basic biological information needed for high quality stock assessments. Scientifically innovative, the task proposes to evaluate and apply new or advanced technology. Examples are: the use of airborne lidar for biomass estimation, advanced molecular methods for species and stock identification, molecular methods for detection of environmental stress, (e.g. ultraviolet radiation), and direct in situ measurement of spawning rates for age specific maturity and fecundity.

1B. Objectives (What are the major objectives being pursued by this CYOP?)

a) To develop methods for predicting year class strength primarily through novel measures of early life history parameters and ocean physics.*

b) To evaluate airborne lasers (lidar) as a method for estimating the abundance of epipelagic fish stocks.*

c) To provide reproductive data needed for ichthyoplankton-based estimates of stock abundance carried out by CFRD.

d) Develop a joint CalCOFI survey program with Mexico.

e) Develop and evaluate population genetic models as tools for stock identification, and assessment of effects of fishing on genetic stock structure.

Methodology

The task has a long tradition of innovation. Currently, we have a strong emphasis in four areas. First, the task has pioneered histological methods for in situ measurement of spawning rates, fecundity, and maturity. These are pivotal measurements for ichthyoplankton-based estimates of stock abundance. In 1994 we completed a coast wide estimate of sardine in cooperation with Mexico and presently methods are being developed for hake.

The second is developing molecular biological techniques as a way to answer long standing questions regarding the fishery resources of the California Current. The California Current can influence recruitment success by the physical transport of larvae, and by its influence on productivity. We are attempting to use genetic markers to determine the influence of current patterns on stock structure. We are developing molecular methods to determine the growth patterns of larvae and the impact of climate changes, including ultraviolet radiation, on the survival of fish larvae. We are also developing methods by which the unique genetic identity of a species can be used to identify fish larvae that can not be identified by other means.

A third area of innovation is the application of laser-based (lidar) technologies to estimate the biomass of epipelagic fishes from the air. The task provides the fisheries expertise in a partnership with OAR engineers.

:301

stification

The authority for task activities include the NMFS Strategic Plan Objectives: 1) Build Sustainable Fisheries (biological measurements required for stock assessments of west coast groundfish such as hake, slope complex and coastal pelagic fishes (sardine, anchovy, mackerel) and longer range studies of recruitment variability and unit stock questions; 2) Healthy Coastal Ecosystems Objectives (economic studies of central valley salmon fishery~. More specifically, biological measurements needed for management of hake and the slope complex and the anchovy are required under federal fisheries management plans. Sardine and mackerel are managed by the state of California using information provided by Coastal Division tasks including 301.

inkages

The task is integrated and coordinated from the Division level to the international level. At the Division level, the task is integrated with other tasks in the Division as it is a major supplier of biological information for stock assessments of Task 330 and parameter estimates for Division-wide estimations of fish biomass carried out by Task 320. The task works also with Tiburon Laboratory in developing molecular genetic methods for identifying larvae in their fishery surveys. At the Regional level, the Division, as a supplier of economic products, works closely with SWR habitat managers. At the NOAA level, the task works cooperatively with OAR in developing new aerial survey techniques, and with NWFSC and AFSC in developing a cooperative program on hake, and with the NOS damage assessment Center. The CalCOFI program is a central integrating element for the Division as a whole, as well as this task resulting in close coordination with state agencies (University of California (Scripps Institution) and California Department of Fish and Game. Internationally, the task and the Division as a whole, has a leadership role in the study of small pelagic fishes. This has lead to research projects developed by the task and Division being duplicated in other countries under international coordinating bodies (PICES and GLOBEC International) providing a broad comparative information base for interpretation, or in the case of Mexico, the two counties working together on joint surveys of trans-boundary species (MEXUS Pacifico).

Contracts

None.

Products/Services

Abundance estimates for coastal pelagic species and groundfish. Improved stock assessment techniques. Recommendations for improved management and restoration of depleted stocks. Information regarding the genetic basis for stock identification, and the preservation of genetic diversity. These products are developed as peer reviewed scientific papers whenever possible. Estimates of economic loss associated with habitat destruction.

301

ents

The CalCOFI program was established as a joint effort of the California Department of Fish and Game, the University of California and NMFS. As such, all of the agencies depend on each other for funding and share information.

Information and reports generated by this program are used by (1) the Pacific Fishery Management Council, (2) the Pacific States Marine Fishery Commission, (3) State/federal cooperative management efforts, (4) U. S. government agents in fisheries currently or prospectively under international management, (5) U. S. representatives in international fisheries investigations (e.g. Mexus Pacifico), (6) government agents that manage marine mammals and seabirds (coastal pelagic species are the primary forage base). 7. Other public groups concerned with near shore ocean management. We are the only molecular biology laboratory in the SW region and as such we provide expertise in this area for the entire region.

Government agents involved in environmental litigation or pursuing mitigation for habitat losses.

SOUTHWEST FISHERIES SCIENCE CENTER
CURRENT YEAR OPERATING PLAN - FORM 5
FY 1997

CYOP Number: SWC - SWC - 301 **Lab/Div:** Coastal Div. **Page:** 1

Title: Population Biology of Fishes

Leader: John Hunter

MILESTONES, EVENTS AND ACTIVITIES SECTION

(For each Task # indicate M = Milestone, E = Event, A = Activity, Sequence #, Description of the Activity, Event or Milestone and the approximate dates of starting and finishing an Activity. Milestone and event dates should be indicated in the date finish column. Use additional pages if required.)

Task #	MEA	Seq #	Major Milestone, Event or Activity Description	Date Start	Date Finish
8L1A3A30	E	1	Conduct cruise to measure reproductive output of hake; structure of hake egg patches for adaptive sampling strategy; and evaluate real-time ichthyoplankton identification as a patch survey tool	10/96	2/97
"	A	2	Conduct studies on the fecundity, maturity and reproductive rates of hake	6/96	1/98
"	A	3	Coordinate international science program on small pelagic fishes under PICES & GLOBEC	10/95	6/98
"	A	4	Coordinate joint science program on fishery resources with Mexico	10/95	6/99
"	A	5	Conduct pilot aerial survey using lidar to detect fish schools	2/97	6/97
"	A	6	Manage joint 1996 CalCOFI symposium on hake ecology & management	10/96	11/96

			survey for 1997		
"	E	8	Edit & publish CalCOFI Symposium on hake	11/96	11/97
8L1A3A31	A	9	Sequence the cytochrome b gene from the majority of rockfish occurring off central and southern California to determine the phylogenetic relationships between species, and to provide a data base for the positive identification of larvae based on their genetic sequence	10/95	8/97
"	A	10	Develop methods for preservation, amplification and sequencing of DNA from larval rockfish occurring in ichthyoplankton tows off central California in order to identify specimens not identifiable by other means	10/95	8/97
"	E	11	Complete book chapter on UV effects on higher trophic levels	10/96	8/97
"	M	12	Complete manuscript on diel cycles of damage and repair in larval fishes exposed to natural levels of ultraviolet radiation	10/95	8/97
"	M	13	Complete manuscript, "Sebastes moseri (Scorpaeniformes: Scorpaenidae), a new rockfish from the Northeast Pacific," with Eitner and Kimbrell	10/96	8/97

NOAA Marine Fisheries Service
Management Information System
Activity Summary report

/:	Name:	Org Code:	Activity Type:
304	Fisheries Environmental Investigations	FR2100	Programmatic Activity

ITY / LOCATION

FACILITY	NAME
SWC1	Southwest Fisheries Science Center

GETED AMOUNTS

LINE ITEM	PHASE	OBJECT CLASS	AMOUNT
8L1A4B32	32	11 - Personnel compensation (labor)	$213,900
8L1A4B32	32	12 - Personnel benefits	$47,000
8L1A4B32	32	21 - Travel, transportation of persons	$1,500
8L1A4B32	32	25 - Contracts, contractual services	$1,000
8L1A4B32	32	26 - Supplies and materials	$1,000
8L1A4B32	32	31 - Equipment, capitalized & noncap.	$2,000
		Sub total for Phase Class:	**$266,400**
		Total for Task:	**$266,400**
		Total for Activity:	**$266,400**

	PERCENT
Pacific coast and Alaska pelagic fisheries	15.00%
Pacific coast groundfish fisheries	85.00%

	PERCENT
Northern Anchovy	15.00%
Pacific Coast Groundfish	85.00%

OCIATED LEGISLATION

	PERCENT
Magnuson act	

OCIATED AGENCIES

NESDIS	National Environmental Satellite, Data & Info Svc
SWC3	Tiburon Lab
SWC4	Monterey Lab

SIGNED STAFFING

NMFS POS_ID	NMFS EMPLOYEE OR VACANT POSITION	PERCENT

2026	BLISS, KENNETH	100.00%
1921	DOTSON, RONALD	100.00%
2182	LYNN, RONALD	100.00%
1886	NISHIMOTO, ROBERT	100.00%

Total for Activity: ~~10~~ FTE's
4

V :304

Problem Statement

The success of spawning, survival, growth, and recruitment of fishes are each impacted by marine environmental conditions. Understanding the relationship of life cycle processes and variations in year class strength to the variations in ocean forcing dynamics is needed in order to provide an effective scientific basis for the management of commercial and recreational fish stocks.

1B. Objectives (What are the major objectives being pursued by this CYOP?)

a) To observe and analyze and document the linkages between the variations in fish life cycles, especially recruitment, and the temporal and spatial variations in ocean dynamics and conditions.

b) To develop predictive skills for the effects upon fish populations of large interannual variations in ocean conditions such as El Nino and anti-El Nino events.

c) To gain a basic understanding of the potential effects of climate change upon the marine ecosystem and especially upon valued fish stocks.

Methodology

The ecosystem approach is followed in these studies to understand fish-ocean relationships needed for the effective management of selected California Current fish stocks. The research program is based on the analysis of field measurements, historical analysis and modeling. Physical process studies address the transport of early life stages by variable currents. Biological process studies will address the role of ocean circulation on stock structure and growth, and community dynamics. Modeling activities explore and synthesize the mechanistic relations between variability in physical oceanographic processes and early life stages of fishes. Research is focused on selected West coast groundfishes and coastal pelagics. In addition to utilize traditional biological and physical oceanographic approaches, extensive use is made of recent technological developments of satellite remote-sensing to the understanding of fish recruitment. This CYOP also supports the NOAA CoastWatch West Coast Regional site and the NOAA/NASA West Coast strategic site for acquiring SeaWiFS satellite ocean color data.

Justification

These projects are justified by the major goals of NOAA, NMFS, and the SWR // 1. Maintain productive fisheries and 2. Advance fish forecasting and ecosystem models. The hake fishery has the largest production (tonnage) of any fishery in the California Current system. CalCOFI data archives provide substantial background material to conduct these studies.

Linkages

This CYOP is an integral part of larger groundfish and coastal pelagics programs and is coordinated with Hunter (301), Smith (320), Moser (318), and Charter (319). There is collaboration with PFEG/Schwing (901), S. Ralston/ Tiburon, Marine Life Research Group/CalCOFI/ SIO. NOAA/COP CoastWatch and Ocean Color programs are integrated with this CYOP.

Contracts

None.

Products/Services

Scientific, peer-reviewed papers published in marine science literature; written and oral reports to the Pacific Fishery Management Council on the occurrence of unusual environmental events along the West Coast and the implications to fishery resources; redistribution of satellite data and data products; El Nino Watch Advisory.

304

ents

Knowledge gained by this research will influence decisions made by the Pacific Fishery Management Councils and Statistical Committee in negotiations with other nations involved in West Coast fisheries. This CYOP is dependent upon collaboration with other programs within the Coastal Division.

SOUTHWEST FISHERIES SCIENCE CENTER
CURRENT YEAR OPERATING PLAN - FORM 5
FY 1997

CYOP Number: SWC - 304 **Lab/Div:** Coastal Div. **Page:** 1

Title: Fisheries Environment Investigations

Leader: Ron Lynn

MILESTONES, EVENTS AND ACTIVITIES SECTION

(For each Task # indicate M = Milestone, E = Event, A = Activity, Sequence #, Description of the Activity, Event or Milestone and the approximate dates of starting and finishing an Activity. Milestone and event dates should be indicated in the date finish column. Use additional pages if required.)

Task #	MEA	Seq #	Major Milestone, Event or Activity Description	Date Start	Date Finish
8L1A4B32	E	1	Plan and conduct physical oceanographic observations on the January 97 hake survey in cooperation with Coastal Division scientists	11/96	1/97
"	M	2	Process hydrographic data and issue reports, graphics, and meta-data files as required for 4 surveys: 9503, 9505, 9510, and 9603	1/97	9/97
"	E	3	Transfer ADCP programming software to new PC and test process two surveys.	11/96	3/97
"	M	4	Complete ms. on spin-down of eddy observed in California Current	1/97	4/97
"	E	5	Develop project to examine shift in subsurface thermal structure resulting from El Niño event	3/97	9/97
"	A	6	Maintain oceanographic equipment and computer systems for logging and analyzing oceanographic data	on-going	Cont.

NOAA Marine Fisheries Service
Management Information System
Activity Summary report

	Name:	Org Code:	Activity Type:
C18	Ecology & Systematics of Fishes	FR2100	Programmatic Activity

TY / LOCATION

FACILITY	NAME
SWC1	Southwest Fisheries Science Center

ETED AMOUNTS

LINE ITEM	PHASE	OBJECT CLASS	AMOUNT
8L1A3A33	33	11 - Personnel compensation (labor)	$251,600
8L1A3A33	33	12 - Personnel benefits	$55,300
8L1A3A33	33	21 - Travel, transportation of persons	$2,000
8L1A3A33	33	26 - Supplies and materials	$7,000
8L1A3A33	33	31 - Equipment, capitalized & noncap.	$3,000
		Sub total for Phase Class:	**$318,900**
		Total for Task:	**$318,900**
		Total for Activity:	**$318,900**

	PERCENT
Pacific coast and Alaska pelagic fisheries	40.00%
Pacific coast groundfish fisheries	40.00%
Nearshore fisheries	20.00%

	PERCENT
Coastal Migratory Pelagics	30.00%
Gulf of Alaska Groundfish	10.00%
Northern Anchovy	30.00%
Pacific Coast Groundfish	30.00%

OCIATED LEGISLATION

	PERCENT
Magnuson act	

OCIATED AGENCIES

CA_DFG	California Department of Fish and Game
MMS	Minerals Management Service
NWC	Northwest Fisheries Science Center
SEC4	Miami Lab

SIGNED STAFFING

NMFS POS_ID	NMFS EMPLOYEE OR VACANT POSITION	PERCENT
0458	ACUNA, ELAINE	100.00%
2029	AMBROSE, DAVID	100.00%
0365	CHARTER, SHARON	100.00%
0208	MOSER, H	100.00%
0697	WATSON, WILLIAM	100.00%

Total for Activity: 5 FTE's

VC 18

Problem Statement

This CYOP helps solve: (1) Need for accurate determination of biomass of fish stocks; (2) Need for assessing recruitment of fish stocks and forecasting year class strength; (3) Need for understanding how fluctuations in abundance and distribution of fish stocks are related to oceanographic flux and trophic interactions over short-term (seasonal/interannual) and long-term (decadal/climate) time scales.

B. Objectives (What are the major objectives being pursued by this CYOP?)

1) To produce data, analyses, and publications on biomass assessment and recruitment of major coastal pelagic fish stocks (northern anchovy, Pacific sardine, Pacific mackerel, Jack mackerel)

2) To produce data, analyses, and publications on biomass assessment and recruitment of major groundfish stocks (Pacific hake, sablefish, Dover sole, rockfishes)

3) To describe fish community structure and interactions in the California Current region and develop analyses leading to the formulation of ecosystem models

Methodology

Ichthyoplankton and associated environmental data from historical and current plankton and trawl surveys are utilized to produce data. Processing involves identification, enumeration, measurement, staging, computer entry, and analysis of approximately 500 species. Using this data, new methods are developed to measure biomass of coastal pelagic and groundfish species and to understand community ecology of California Current region. Examples are the egg production methods developed for coastal pelagics (eg., northern anchovy, Pacific sardine) and groundfish species (eg., Dover sole and sablefish).

Justification

This project is based on the following objectives of the NMFS Southwest Region Strategic Plan: (1) Rebuild overfished marine fisheries; (2) Maintain currently productive fisheries; (3) Advance fisheries forecasts and ecosystem models; (4) Integrate conservation of protected species and fisheries management; (5) Protect living marine resource habitat; (6) Improve the effectiveness of international fisheries relationships. Choices and priorities in the implementation of this program are based on priorities established in the strategic plan.

Linkages

This program is closely linked and has extensive collaboration with all other CFRD programs and particularly with Coastal & Pacific Fisheries Investigations (Richard Charter) and with Survey Systems Development and Evaluation (Paul Smith). The program continues a long history of collaborative interaction with other SWFSC laboratories (Honolulu, Bruce Mundy; Monterey, Boehlert; Tiburon, Lenarz, Ralston) and with ichthyoplankton groups at all NMFS centers (AFSC, Kendall; SEFSC, William Richards; NEFSC, Fahay; Systematics Laboratory, Bruce Collette). Minerals Management Service has funded the production of an identification guide to early stages of California Current region fishes. The program has close ties with: Scripps Institution of Oceanography (Richard Rosenblatt, George Hemingway, Mark Ohman, Michael Mullin, Loren Haury), the California Dept. of Fish and Game (Patricia Wolf, Thomas Barnes), Mexico (CICESE, CICIMAR, CIB, IPN, UNAM), and Canada (Nanaimo).

Contracts

None.

N 318

Products/Services

1) Data and analyses leading to estimation of biomass and recruitment of fish stocks; (2) Data bases and data reports ocumenting changes in distribution and abundance of eggs and larvae of fish species in the California Current region from 939 to the present; (3) Ecological, community, and time series analyses elucidating species interactions and the effects of nvironment on fish abundance and distribution; (4) Scientific publications on new methodologies for assessing biomass and ecruitment of important fish stocks; (5) Scientific publications (journal articles, comprehensive treatises) documenting fish eproduction and early life history; (6) Training courses on the use of ichthyoplankton techniques in stock assessment

Clients

Clients: Fisheries and marine scientists in world-wide public and private institutions; fisheries managers and councils; fishing ndustry; private consulting firms and conservation agencies. Suppliers: Collaborating oceanographers

SOUTHWEST FISHERIES SCIENCE CEN...

CURRENT YEAR OPERATING PLAN - FORM 5

FY 1997

CYOP Number: SWC - 318 Lab/Div: CFRD

Title: Fisheries Ecology and Assessment- CalCOFI

Leader: H. Geoffrey Moser

MILESTONES, EVENTS AND ACTIVITIES SECTION

(For each Task # indicate M = Milestone, E = Event, A = Activity, Sequence #, Description of the Activity, Event or Milestone and the approximate dates of starting and finishing an Activity. Milestone and event dates should be indicated in the date finish column. Use additional pages if required.)

Task #	MEA	Seq #	Major Milestone, Event or Activity Description	Date Start	Date Finish
8L1A3A33	M	1	Complete identification of fish eggs and larvae from CalCOFI Ichthyoplankton Survey cruises 1985-1995; collaborate with Richard Charter on update of CalCOFI computer data base for these cruises	9/95	9/98
"	A	2	Groundfish biomass assessment and recruitment: Participate in planning and conduct of Hake Survey Cruises and in analysis and publication of results	9/96	9/97
"	A	3	Vertical distribution of hake eggs in relation to stage of development and temperature (with N. Lo and P. Smith)	9/96	9/97
"	A	4	Hake egg and larva surveys (P. Smith, R. Lynn, G. Moser, R. Charter, N. Lo)	3/95	5/97

			Continue analysis and manuscript development resulting from past survey cruises (e.g., Dover sole, Thornyheads)		
"	A	6	Collaborative studies on eggs of sardine and other fishes from plankton pump samples and development of manuscripts from these studies	1/96	9/98
"	A	7	Manuscript with P. Smith on relationship between larval assemblages and larval abundance	6/94	9/97
"	A	8	Investigation of 3-D dynamic oceanography influence in larval assemblages (Dixon, Smith, Moser)	2/96	Cont.
"	A	9	Collaboration with J. Butler on aging (dependent on hiring technician to prepare otoliths)	9/96	Cont.
"	A	10	Stage eggs for annual sardine and anchovy biomass estimates	9/96	Cont.
"	A	11	Continue organization, curation, and archiving of CalCOFI ichthyoplankton collections	9/96	Cont.
"	A	12	Continue to work up data on surface (neuston) samples, the MOPS and PODS cruises, and vertical distribution cruises	9/96	Cont.
"	A	13	Continue studies on reproduction, functional morphology, and early life history strategies of fishes	9/96	Cont.
"	A	14	Scientific services: Review and edit manuscripts and research proposal and participate in advisory panels	9/96	Cont.
"	A	15	Provide consultation and training related to research on fisheries, ichthyoplankton methods, and reproductive biology of fishes	9/96	Cont.

NOAA Marine Fisheries Service
Management Information System
Activity Summary report

	Name:	Org Code:	Activity Type:
19	Coastal & Pacific Fisheries Resource Investigation	FR2100	Programmatic Activity

ITY / LOCATION

FACILITY	NAME
SWC1	Southwest Fisheries Science Center

ETED AMOUNTS

LINE ITEM	PHASE	OBJECT CLASS	AMOUNT
8L1A6A34	34	11 - Personnel compensation (labor)	$321,200
8L1A6A34	34	12 - Personnel benefits	$53,000
8L1A6A34	34	21 - Travel, transportation of persons	$2,300
8L1A6A34	34	22 - Transportation of things	$1,000
8L1A6A34	34	23 - Rent, utilities, telecommunications	$2,500
8L1A6A34	34	25 - Contracts, contractual services	$25,000
8L1A6A34	34	26 - Supplies and materials	$8,000
8L1A6A34	34	31 - Equipment, capitalized & noncap.	$4,900
		Sub total for Phase Class:	**$417,900**
		Total for Task:	**$417,900**
		Total for Activity:	**$417,900**

	PERCENT
Pacific coast and Alaska pelagic fisheries	60.00%
Pacific coast groundfish fisheries	40.00%

	PERCENT
Northern Anchovy	50.00%
Pacific Coast Groundfish	50.00%

OCIATED LEGISLATION

	PERCENT
Magnuson act	

OCIATED AGENCIES

AKC	Alaska Fisheries Science Center
CA_DFG	California Department of Fish and Game
SIO	Scripps Institution of Oceanography

NED STAFFING

NMFS POS_ID	NMFS EMPLOYEE OR VACANT POSITION	PERCENT
2609	ABRAMENKOFF, DIMITRY	100.00%
0663	CHARTER, RICHARD	100.00%
2231	DUNN, LUCY	90.00%
2446	GRIFFITH, DAVID	100.00%
2295	HADDOX, M	90.00%
0456	HAYS, AMY	100.00%
1426	MANION, SUSAN	80.00%

Total for Activity: 6.6 FTE's

NOAA Marine Fisheries Service
Management Information System
Activity Narratives Report

M 319

Problem Statement

This task provides the basic information required for the annual assessment of stocks supporting California coastal fisheries. This task also provides all the logistics, staffing and data management for the California Cooperative Oceanographic Fisheries Investigation (CalCOFI).

B. Objectives (What are the major objectives being pursued by this CYOP?)

a) To provide logistics, staffing and data management for the CalCOFI program.

b) To provide logistics and staffing to conduct two groundfish cruises.

c) To convert the existing data base management system from the UCSD Vax system to the new IT-95 computer system.

Methodology

We will complete six ichthyoplankton survey cruises collecting over 1500 plankton samples. All of the data from these cruises and samples will be processed by the personnel of this task and cooperating people from the University of California's Scripps Institution of Oceanography. These data will be added to the historical time series. We will also be updating and converting the CalCOFI historical data bases (1951 - 1994). The Aerial Marine Resources Monitoring (AMRMS) data bases will also be updated as we get new data.

Justification

This project is based on the following objectives of the NMFS Southwest Region Strategic Plan: (1) Rebuild overfished marine fisheries; (2) Maintain currently productive fisheries; (3) Advance fisheries forecast and ecosystem models; (4) Integrate conservation of protected species and fisheries management; (5) Protect living marine resource habitat; (6) Improve the effectiveness of international fisheries relationships.

Linkages

The principal linkages are with the other task within the Coastal Division, particularly Ecology & Systematics of Fishes CalCOFI (Dr. Moser's group) and with the Survey Systems Analysis (Dr. Smith's group). We also have close ties with Scripps Institution of Oceanography and the California Department of Fish & Game for the CalCOFI Program.

Contracts

Aerial Marine Resources Monitoring System spotter pilots contracts (5%).

Products/Services

The major products of this task are the CalCOFI data base, the AMRMS data base, and the newly acquired groundfish information. Major services include logistics for all the Coastal Division cruises, data base management and assistance in data analysis.

Clients

The main clients will be the Pacific Fishery Management Council, Scripps Institution of Oceanography, California Department of Fish & Game, and other NMFS fishery centers.

CURRENT YEAR OPERATING PLAN - FORM 5
FY 1997

CYOP Number: SWC - 319 **Lab/Div:** Coastal

Title: Coastal & Pacific Fisheries Resources Investigations

Leader: Richard Charter

MILESTONES, EVENTS AND ACTIVITIES SECTION

(For each Task # indicate M = Milestone, E = Event, A = Activity, Sequence #, Description of the Activity, Event or Milestone and the approximate dates of starting and finishing an Activity. Milestone and event dates should be indicated in the date finish column. Use additional pages if required.)

Task #	MEA	Seq #	Major Milestone, Event or Activity Description	Date Start	Date Finish
8L1A6A34	A	1	Supervise and maintain timely sorting of plankton samples	10/96	9/97
"	A	2	Edit all data collected at sea: correct all errors, enter into CalCOFI data bases	10/96	9/97
"	A	3	Design cruises patterns, establish activities, prepare cruise announcements and reports	10/96	9/97
"	A	4	Prepare all seagoing equipment for cruises; design and construct experimental gear	10/96	9/97
"	A	5	Maintain close liaison with captain and crew of the R/V Jordan and staff of Marine Life Research Group at SIO	10/96	9/97
"	A	6	Maintain close liaison with captain and crew of ship of cooperative agencies	10/96	9/97

			from CalCOFI data bases when needed	10/96	9/97
"	A	8	Update and maintain AMRMS (aerial survey) data bases	10/96	9/97
"	E	9	Complete conversion of CalCOFI data management system to the IT-95 computer system	10/96	9/97
"	A	10	Update the CalCOFI other fish larvae data bases for the years 1984 - 1994	8/96	6/97
"	A	11	Provide consultation to CFRD staff for all matters pertaining to purchase and maintenance of computer hardware and software	10/96	9/97
"	A	12	Provide expert advice to Center administration data management, shipboard computing, word processing, A-76, and IT-95	10/96	9/97
"	A	13	Design and complete one hake research cruise using the high speed midwater trawl	10/96	3/97
"	E	14	Verify the 1984-1996 Other Fish Larvae data and produce a data report for each year	11/96	9/97
"	A	15	Reformat and add synonym's to all the CalCOFI tables to simplify access to the CalCOFI data	8/96	11/97
"	A	16	Develop a NMFS CalCOFI Web home page	9/96	9/97
"	A	17	Develop and run edit checks of all CalCOFI ORACLE relational data base tables with cross checks between all tables and correct any errors founds	10/96	9/97

			Design and develop ORACLE relational data base for the Aerial Marine Resources Monitoring System. Evaluate incorporating these data bases into the "Enterprise Model"		

NOAA Marine Fisheries Service
Management Information System
Activity Summary report

	Name:	Org Code:	Activity Type:
320	Survey Systems Development & Evaluation	FR2100	Programmatic Activity

ITY / LOCATION

FACILITY	NAME
SWC1	Southwest Fisheries Science Center

ETED AMOUNTS

LINE ITEM	PHASE	OBJECT CLASS	AMOUNT
8L1A6A35	35	11 - Personnel compensation (labor)	$217,900
8L1A6A35	35	12 - Personnel benefits	$47,900
8L1A6A35	35	21 - Travel, transportation of persons	$3,000
8L1A6A35	35	25 - Contracts, contractual services	$3,000
8L1A6A35	35	26 - Supplies and materials	$10,000
		Sub total for Phase Class:	**$281,800**
		Total for Task:	**$281,800**
		Total for Activity:	**$281,800**

	PERCENT
Pacific coast and Alaska pelagic fisheries	60.00%
Pacific coast groundfish fisheries	40.00%

	PERCENT
Northern Anchovy	60.00%
Pacific Coast Groundfish	40.00%

CIATED LEGISLATION

	PERCENT
Endangered Species act	
Magnuson act	
Marine Fisheries act	

CIATED AGENCIES

CADFG	CALIFORNIA DEPARTMENT OF FISH AND GAME
SIO	Scripps Institution of Oceanography

GNED STAFFING

NMFS POS_ID	NMFS EMPLOYEE OR VACANT POSITION	PERCENT

0147	BUTLER, JOHN	100.00%
1989	LO, NANCY	100.00%
1254	SMITH, PAUL	100.00%

Total for Activity: **3 FTE's**

Y 320

Problem Statement

Advanced demographic techniques are suitable for most fisheries management requirements: but, the population instability inherent in some fish stocks, particularly temperate clupeoids and gadoids, will require, in addition, recruitment projections to nsure that delays in evidence of over-fishing and population failure do not lead to population collapse and long-term losses in ish production and the subsequent economic and social disruption such failures cause.

A principle scientific problem being addressed is that these schooling coastal pelagic planktivores inhabit all of the emperate coasts of the world, constitute a quarter of world marine fish yield, and undergo decadal scale fluctuations in bundance which may become more dramatic or more problematic with climate change. It appears that the production of these tocks is markedly influenced within the first year of life before standard demographic techniques of assessment are applied.

Since these management and scientific problems arise in the life cycle long before standard assessments using catch analysis apply, it is necessary to devise precise and economical monitoring procedures for pre-recruitment processes. Since ome of the processes are demographic, some processes involve the marine biological community, and some processes are principally features of the physical and chemical environment, ecosystem approaches are necessary. In this CYOP we will emphasize these processes in the Pacific hake which spawns off California and Baja California.

1B. Objectives (What are the major objectives being pursued by this CYOP?)

a) To conduct a series of assessments of age-specific growth rate of pre-recruit hake and a mortality rate in the first two months of life for the largest stock of fish on the west coast of North America.

b) To update population parameters of sardine.

Methodology

a) With Scripps Institution of Oceanography, and all the tasks within the Coastal Division, conduct enhanced precision surveys newly designed to vary sampling effort as a function of contemporary measures of variance.

b) By a cooperative analysis [with Mexican educational and management agency personnel] of the coast-wide Sardine spawning surveys.

c) By daily otolith growth increments and gonadal histology to resolve the issue of maturation in Pacific sardine.

stification

Our principal goals in the Survey Systems Task are based on the NOAA plan: 1)assess the status of fisheries resources, 2) advance fishery prediction, 3) provide empirical data on relatively stable and recovering species like the Pacific hake, Pacific sardine, and Pacific mackerel, 4) design expanded ecosystems monitoring procedures, and 5) improve understanding of the causes of variability in commercial fish stocks. Our initiation and refinement of assessment procedures also contributes to the Global Climate Change initiatives through national and international GLOBEC (Small Pelagics Climate Change), PICES (Working Group 3 on Coastal Schooling Pelagic Fishes), CalCOFI, and MEXUS-
Pacifico. OLO has recommended work on the 3-5 year ahead recruitment prediction for Pacific hake which is a major emphasis in this CYOP.

V 320

L kages

ecause of the small size of this task, our principal linkages are with other tasks in the Coastal Division, Pacific Fisheries nvironmental Laboratory at Pacific Grove, Tiburon Laboratory, the Marine Life Research Group and Biological)ceanography Curricular Group of the University of California San Diego, Department of Biology of the University of 'alifornia at Los Angeles and Santa Cruz, and the marine bird research group of the University of California Irvine. We also upply time series data (a one of a kind commodity in the Coastal Division) to fisheries labs in Great Britain and academic esearchers.

Ontracts

Jone.

Products/Services

New fundamental information on the pre-recruit vital parameters on the most important stocks of fish has originated in the Survey Systems task; large variability in production, our local stocks, the Pacific hake and the Pacific sardine, typify the highly variable stocks. We formulate cogent field and analytical tests of the success of spawning and continued recruit production at he earliest possible time.

Clients

The international, federal and state fishery management community is now stymied in the effective management of temperate coastal fishes with short life spans and high recruitment variability at the inter-annual and interdecadal time scales.

CURRENT YEAR OPERATING PLAN - FORM 5
FY 1997

CYOP Number: SWC - 320 **Lab/Div:** Coastal

Title: Survey Systems Development & Evaluation

Leader: Paul Smith

MILESTONES, EVENTS AND ACTIVITIES SECTION

(For each Task # indicate M = Milestone, E = Event, A = Activity, Sequence #, Description of the Activity, Event or Milestone and the approximate dates of starting and finishing an Activity. Milestone and event dates should be indicated in the date finish column. Use additional pages if required.)

Task #	MEA	Seq #	Major Milestone, Event or Activity Description	Date Start	Date Finish
8L1A635	M	1	Manuscript on the maturation of Pacific sardine using daily increments in Pacific sardine otoliths from 1994 EPM Survey (Butler)	10/94	10/96
"	A	2	Analyze otoliths of Pacific hake larvae to determine growth rate (Butler)	5/95	2/97
"	A	3	Comparative studies of ageing and growth of sardine (Butler with assistant)	11/96	5/98
"	M	4	Manuscript on the feasibility of using LIDAR for assessing epipelagic schooling fishes (Lo and Hunter)	12/94	9/97
"	A	5	Implement adaptive sampling on hake larval surveys off California (Lo, Smith)	3/95	5/97

			pelagic fish (Lo, Smith, Hunter, Churnside or OTL)	5/97	5/97
8L1A6A35	A	7	Develop statistical procedures to estimate egg production of sardine for pump samples (Lo)	3/96	12/96
"	A	8	Analysis of changing of spatial distribution of sardine eggs by age from pump samples (Lo and Smith)	8/96	12/97
"	A	9	Conduct hake larval growth surveys (Smith, Lynn, Moser, Charter, and Lo)	3/95	5/97
"	E	10	Manuscript on the relation between larval assemblage and larval abundance (Smith and Moser)	6/94	1/97
"	E	11	Investigation of 3-D dynamic oceanography influence on larval assemblages (Dixon, Smith, and Moser)	2/96	6/97
"	E	12	Plan climatic comparison of production, ichthyofauna between 1956/1972/1998	7/96	11/96
"	E	13	Review of Pacific sardine biological history (Smith and Dixon of SIO)	10/96	12/96
"	M	14	Spatial and temporal scales of Pacific whiting recruitment (Smith, Horn of Buffalo State Univ. of N.Y.)	6/96	8/97
"	E	15	Size-specific larval dispersal of anchovy, sardine, Pacific mackerel and jack mackerel from 1951-1996 (Smith, Charter, and Moser)	10/96	12/97

NOAA Marine Fisheries Service
Management Information System
Activity Summary report

	Name:	Org Code:	Activity Type:
30	Commericial & Recreational Fisheries Research for Management	FR2100	Programmatic Activity

TY / LOCATION

FACILITY	NAME
SWC1	Southwest Fisheries Science Center

ETED AMOUNTS

LINE ITEM	PHASE	OBJECT CLASS	AMOUNT
8L1C2A30	30	11 - Personnel compensation (labor)	$204,200
8L1C2A30	30	12 - Personnel benefits	$44,900
8L1C2A30	30	21 - Travel, transportation of persons	$15,000
8L1C2A30	30	26 - Supplies and materials	$5,000
		Sub total for Phase Class:	**$269,100**
		Total for Task:	**$269,100**
		Total for Activity:	**$269,100**

	PERCENT
Pacific coast and Alaska pelagic fisheries	40.00%
Pacific coast groundfish fisheries	40 ~~55~~.00%
Pacific ~~marine mammals~~ COAST SALMON FISHERIES	5.00%
NEARSHORE FISHERIES	15.00%

	PERCENT
Northern Anchovy	20 ~~50~~.00%
Pacific Coast Groundfish	65 ~~50~~.00%
GULF OF ALASKA GROUNDFISH	~~[illegible]~~ 5%
COMM'L & REC. SALMON	10%

OCIATED LEGISLATION

	PERCENT
Endangered Species act	
Magnuson act	
Marine Mammal Protection act	

OCIATED AGENCIES

CADFG	CALIFORNIA DEPARTMENT OF FISH AND GAME
NWC	Northwest Fisheries Science Center
PFMC	Pacific Fishery Management Council
SWC1	Southwest Fisheries Science Center
AKC	ALASKA FISHERIES SCIENCE CENTER
SWR	SW REGION

NED STAFFING

NMFS POS_ID	NMFS EMPLOYEE OR VACANT POSITION	PERCENT
1723	HERRICK, SAMUEL	100.00%
0124	JACOBSON, LAWRENCE	100.00%
0848	SQUIRES, DALE	100.00%

Total for Activity: 3 FTE's

VC 30

Problem Statement

hat is the optimum yield and how should it be obtained from coastal pelagic and groundfish fisheries?

ow should limited entry, vessel buyback and bycatch reduction systems be designed?

ow can scientists predict and estimate economic and biological effects of management actions?

ow can biological and economic problems be solved at minimum cost?

B. Objectives (What are the major objectives being pursued by this CYOP?)

) To produce biomass estimates used by managers in setting fishery quotas for coastal pelagic species and groundfish.

) To predict economic effects of fishery management decisions.

) To develop statistical and economic models for assessment and prediction of fishery performance.

i) To manage fisheries.

Methodology

Biological and economic models based on data collected by other tasks and agencies.

Outreach and collaboration with managers (Pacific Fishery Management Council and California Department of Fish and Game).

Justification

Groundfish and coastal pelagic fisheries are the largest and most valuable along the west coast. Groundfish are managed by NMFS under a FMP. Pelagics are important forage items for many predators including commercially and recreationally important fish, marine mammals and several endangered species, but California is unable to monitor, assess and manage coastal pelagic species without technical support from NMFS.

Economic factors have become increasingly important in FMP management of groundfish as stocks have become fully exploited and the fishery overcapitalized. All measures used by managers have economic dimensions that must be analyzed. This task supplies a significant fraction of the coastwide economic expertise.

Linkages

Pacific Fishery Management Council; California Department of Fish and Game; NMFS Southwest Region; NMFS Northwest Fisheries Science Center; NMFS Alaska Fisheries Science Center; and other tasks in the Division.

Contracts

California Halibut Recruitment Study - Test and configure bathymetric data.

California Halibut Recruitment Study - Assemble juvenile halibut database.

30

ducts/Services

ological and economic descriptions of fishery status.

nalysis of biological and economic effects from proposed management options.

etter models for assessment of stocks and prediction of economic and biological events.

eviews of biological and economic analyses.

cientific papers.

ents

lients: Pacific Fishery Management Council, California Department of Fish and Game, Oregon Department of Fish and Wildlife, Washington Department of Fisheries, Pacific States Marine Fisheries Commission, Coastal Pelagic Species Fishery, Groundfish fishery, other NMFS regions and science centers, University of California at San Diego.

Suppliers: Other tasks in Division, California Department of Fish and Game, Oregon Department of Fish and Wildlife, Washington Department of Fisheries, Pacific States Marine Fisheries Commission, other NMFS regions and science centers, University of California at San Diego.

SOUTHWEST FISHERIES SCIENCE CENTER
CURRENT YEAR OPERATING PLAN - FORM 5
FY 1997

CYOP Number: SWC - 330 **Lab/Div:** Coastal **Page:** 1

Title: Commercial & Recreational Fisheries Research for Management

Leader: Larry Jacobson

MILESTONES, EVENTS AND ACTIVITIES SECTION

(For each Task # indicate M = Milestone, E = Event, A = Activity, Sequence #, Description of the Activity, Event or Milestone and the approximate dates of starting and finishing an Activity. Milestone and event dates should be indicated in the date finish column. Use additional pages if required.)

Task #	MEA	Seq #	Major Milestone, Event or Activity Description	Date Start	Date Finish
8L1C2A30	M	1	Complete description of California rockfish fishery for Pacific Fishery Management Council	10/96	7/97
"	M	2	Develop indices of larval abundance for deep water groundfish species and complete report	10/96	7/97
"	M	3	Submit review of international multispecies ITQ programs to economics journal	10/96	9/97

Pelagic Fisheries Resources Division

NOAA Marine Fisheries Service
Management Information System
Activity Summary report

	Name:	Org Code:	Activity Type:
01	Large Pelagics Stock Investigation	FR2100	Programmatic Activity

TY / LOCATION

ACILITY	NAME
SWC1	Southwest Fisheries Science Center

ETED AMOUNTS

INE ITEM	PHASE	OBJECT CLASS		AMOUNT
8L1A6A40	40	11 - Personnel compensation (labor)		$171,200
8L1A6A40	40	12 - Personnel benefits		$37,700
8L1A6A40	40	21 - Travel, transportation of persons		$7,500
8L1A6A40	40	23 - Rent, utilities, telecommunications		$1,000
8L1A6A40	40	24 - Printing, reproduction		$800
8L1A6A40	40	25 - Contracts, contractual services		$163,000
8L1A6A40	40	26 - Supplies and materials		$17,100
			Sub total for Phase Class:	**$398,300**
			Total for Task:	**$398,300**
8L1A6A41	41	11 - Personnel compensation (labor)		$51,700
8L1A6A41	41	12 - Personnel benefits		$11,400
8L1A6A41	41	21 - Travel, transportation of persons		$2,500
8L1A6A41	41	24 - Printing, reproduction		$1,500
8L1A6A41	41	26 - Supplies and materials		$2,000
			Sub total for Phase Class:	**$69,100**
			Total for Task:	**$69,100**
			Total for Activity:	**$467,400**

	PERCENT
Pacific coast groundfish fisheries	20.00%
Pacific highly migratory pelagic fisheries	80.00%

	PERCENT
Pacific Coast Groundfish	20.00%
Western Pacific Pelagics	10.00%

OCIATED LEGISLATION

	PERCENT
Magnuson act	

larine Fisheries act

IATED AGENCIES

SWC1 Southwest Fisheries Science Center

NED STAFFING

NMFS POS_ID	NMFS EMPLOYEE OR VACANT POSITION	PERCENT
2495	AU, DAVID	100.00%
0279	BARTOO, NORMAN	100.00%
1925	HOLTS, DAVID	100.00%
0449	RAMON, DARLENE	100.00%

Total for Activity: **4 FTE's**

NOAA Marine Fisheries Service
Management Information System
Activity Narratives Report

01

blem Statement

is task investigates and provides advice and information on stocks of large pelagics found in both the Oceanic ecosystem d the California Current ecosystems of the Pacific Ocean. Investigations and work plans are formulated to meet quirements specified by NMFS resource managers, international fisheries agreements (IATTC, ICCAT, IOFC, IPTP, S. acific Tuna Treaty) and regional fisheries management councils (Pacific and Western Pacific). The data and advice are used management negotiations and discussions regarding access, exploitation, rebuilding, and protection of the resources, and for anagement of the fisheries. Accomplishments of this task directly support the NMFS objectives of maintaining currently roductive fisheries and improving the effectiveness of international fisheries relationships.

B. Objectives (What are the major objectives being pursued by this YOP?)

) To produce up-to-date stock assessments

) To provide fisheries forecasts for the West Coast albacore fisheries

) To contribute information on the population biology of North Pacific tunas, billfishes and sharks

ethodology

This task collects data and biological information developed from experiments and fishery sampling and integrates similar data generated by related tasks. The adequacy and accuracy of data and information are assessed, and appropriate fisheries and ecological models are employed or developed to produce required assessments and advice.

stification

Activities are carried out to support U.S. formal and informal agreements with foreign countries and international organizations.

nkages

This CYOP is linked to CYOP 411, 421 and 431 at SWC1, and CYOP 720, 721 and 722 at SWC2.

ntracts

None.

oducts/Services

Products are scientific reports and publications providing assessments and ecological information and data on stocks and fisheries as required. Products are distributed in the form of internal reports, newsletters, SWFC Administrative Reports, NOAA Technical Memorandums, and various technical publications.

lients

Principal clients include NMFS managers, U.S. Government commissioners to international organizations, SSC of regional councils, industry leaders, and SWFSC scientists. Input information is from industry leaders and foreign scientists.

CURRENT YEAR OPERATING PLAN - FORM 5
FY 1997

CYOP Number: SWC - 401 Lab/Div: SWFSC/PFRD

Title: Albacore & Sharks Investigation

Leader: Bartoo

MILESTONES, EVENTS AND ACTIVITIES SECTION

(For each Task # indicate M = Milestone, E = Event, A = Activity, Sequence #, Description of the Activity, Event or Milestone and the approximate dates of starting and finishing an Activity. Milestone and event dates should be indicated in the date finish column. Use additional pages if required.)

Task #	MEA	Seq #	Major Milestone, Event or Activity Decripition	Date Start	Date Finish
8L1A6A40	A	1	Produce and publish chapters for Blue Book/National SOS Reports. Suport Western Pacific Council large pelagics team	Oct 96	Sep 97
8L1A6A40	A	2	Prepare Albacore Forecast/maintain constituent contacts.	Oct 96	Sep 96
8L2A6A40	E	3	Participate in 2nd International Symposium on Pacific swordfish. Produce workshop documentation.	Dec 96	Mar 97
8L1A6A40	E	4	Organize 15th North Pacific albacore Workshop; develop SBI's and research plan with colleagues.	Oct 96	Oct 97
8L1A6A40	A	5	Publish results on N. Pacific albacore maturity/spawning; effects of presevatin on data; analyze N. Pac. Maturity samples; decadal effects of climate.	Oct 96	Sep 97
8L1A6A40	M	6	Organize a scientific session for the AFS annual meeting to report on results of the U.S.-Mexico cooperative research on Pacific sharks.	Oct 96	Sep 97

			conduct bycatch experiment; develop assessment strategy for thresher sharks.		
8L1A6A41	M	8	Publish Billfish Newsletter.	Jan 97	Jun 97
8L1A6A41	A	9	Distribute billfish tags and maintain release-return records.	Oct 96	Sep 97

NOAA Marine Fisheries Service
Management Information System
Activity Summary report

	Name:	Org Code:	Activity Type:
1	Multispecies Data Collection & Evaluation	FR2100	Programmatic Activity

TY / LOCATION

ACILITY	NAME
WC1	Southwest Fisheries Science Center

TED AMOUNTS

INE ITEM	PHASE	OBJECT CLASS	AMOUNT
L1A6A	42	11 - Personnel compensation (labor)	$45,700
L1A6A	42	12 - Personnel benefits	$217,800
L1A6A	42	21 - Travel, transportation of persons	$8,000
L1A6A	42	23 - Rent, utilities, telecommunications	$3,100
L1A6A	42	24 - Printing, reproduction	$1,500
L1A6A	42	26 - Supplies and materials	$4,000
		Sub total for Phase Class:	**$280,100**
		Total for Task:	**$280,100**
3L1C1V	40	11 - Personnel compensation (labor)	$140,100
3L1C1V	40	12 - Personnel benefits	$30,800
3L1C1V	40	21 - Travel, transportation of persons	$500
3L1C1V	40	23 - Rent, utilities, telecommunications	$500
		Sub total for Phase Class:	**$171,900**
		Total for Task:	**$171,900**
		Total for Activity:	**$452,000**

	PERCENT
Pacific highly migratory pelagic fisheries	70.00%
Pacific marine mammals	20.00%
Sea turtles	10.00%

	PERCENT
Pacific Coast Groundfish	0.00%
Western Pacific Pelagics	0.00%

CIATED LEGISLATION

	PERCENT
Magnuson act	
Marine Fisheries act	

arine Mammal Protection act

IATED AGENCIES

WC1	Southwest Fisheries Science Center

IED STAFFING

MFS POS_ID	NMFS EMPLOYEE OR VACANT POSITION	PERCENT
972	CHILDERS, JOHN	100.00%
449	COAN, ATILIO	100.00%
402	DEALY, DONNA	100.00%
915	JACKSON, ALAN	100.00%
894	PRESCOTT, DOUGLAS	100.00%
119	RASMUSSEN, RANDALL	100.00%
381	SHOW, CHRISTINA	100.00%
934	WALLACE, KENNETH	100.00%

Total for Activity: **8 FTE's**

NOAA Marine Fisheries Service
Management Information System
Activity Narratives Report

C 11

Problem Statement

Monitoring ecosystems and forecasting changes in marine resources require collection of data pertinent to the resource and environment, as well as maintaining the data in easily accessible databases for review, analysis and dissemination of these data. The objective of this task is to collect required data from various published sources, from ablished data objectives being pursued by this CYOP?) exchange agreements, and from actual field sampling programs. is task is also responsible for using state of the art automated data systems for archiving and processing the data. Data llection and bases being maintained include Atlantic, Pacific, and Indian Ocean large pelagics data and marine mammal server data. Accomplishment of this task contributes directly to the NMFS objectives of maintaining currently productive heries, integrating conservation of protected species and improving the effectiveness of international fisheries relationships.

. Objectives (What are the major objectives being pursued by this (OP?)

To process and maintain data for a SWC global tuna base and analysis.

To manage data collected on marine mammals.

To evaluate sampling design and provide support for sampling activities.

hodology

This task routinely handles tuna-dolphin observer data, coastal gillnet observer data, tuna fisheries data, and other data llected from field experiments, expeditions, and port sampling. Various sources including publications, international ntacts, data exchange agreements, etc. are used. This task also uses statistical methodologies to velop and maintain field sampling programs for the collection of information on fisheries for large pelagics, and for llection of information on marine mammals. Up-to-date computer technologies are used to develop and maintain data base stems and to provide software for supporting analyses of oceanic and California Current ecosystems, d resource forecasting for large pelagic stocks and marine mammals.

utification

Activities are carried out to support U.S. formal and informal agreements with foreign countries and international ganizations.

kages

This CYOP is linked to CYOP 401, 421, and 431 at SWC1, and CYOP 720, 721 and 722 at SWC2.

ntracts

one.

ducts/Services

Principal products of this task are software, data bases and data collection systems in support of research. This task ovides annual summaries and analyses of data by fisheries for use in stock assessments and fisheries evaluations.

11

nts

Products and services produced by this task are made available for use by other SWFSC tasks for various foreign and mestic fisheries management organizations, NOAA fishery administrators, industry and constituency groups and fishery anagers. Data are also used by contituency groups involved in fishery development, and marine mammal d large pelagics issues.

CYOP Number: SWC - 411 **Lab/Div:** SWFSC/PFRD **Page:** 1

Title: Large Pelagic Data Systems

Leader: Atilio L. Coan, Jr.

MILESTONES, EVENTS AND ACTIVITIES SECTION

(For each Task # indicate M = Milestone, E = Event, A = Activity, Sequence #, Description of the Activity, Event or Milestone and the approximate dates of starting and finishing an Activity. Milestone and event dates should be indicated in the date finish column. Use additional pages if required.)

Task #	MEA	Seq #	Major Milestone, Event or Activity Descripition	Date Start	Date Finish
8L1A6A42	A	1	Develop and maintain data bases for Pacific Ocean and Indian Ocean tunas and other large pelagics.	Oct 96	Sep 97
8L1A6A42	M	2	Produce report summarizing data for the 1995-96 U.S. fisheries for albacore in the North and South Pacific Ocean.	Oct 96	Jul 97
8L1A6A42	A	3	Process and submit data from S. Pac. Tuna Treatly	Oct 96	Aug 97
8L1A6A42	A	4	Provide PFRD with software, and hardware support.	Oct 96	Sep 97
8L1A6A42	M	5	Complete installation of an enterprise, ORACLE database systems for fisheries data held by PFRD.	Oct 96	Sep 97
8L1C1V40	A	6	Provide MMD with software and hardware support.	Oct 96	Sep 97
8L1C1V40	A	7	Produce comprehensive data base edits in support of marine mammal observer data analyses.	Oct 96	Sep 97
8L1C1V40	E	8	Develop and maintain data bases for marine mammals.	Oct 96	Sep 97

			Pacific marine mammal research cruises.		

NOAA Marine Fisheries Service
Management Information System
Activity Summary report

	Name:	Org Code:	Activity Type:
1	Oceanic Fisheries & Evaluation	FR2100	Programmatic Activity

TY / LOCATION

ACILITY	NAME
WC1	Southwest Fisheries Science Center
WC2	Honolulu Lab

TED AMOUNTS

INE ITEM	PHASE	OBJECT CLASS	AMOUNT
L1C1A	M8	11 - Personnel compensation (labor)	$118,800
L1C1A	M8	12 - Personnel benefits	$26,100
L1C1A	M8	21 - Travel, transportation of persons	$23,500
L1C1A	M8	23 - Rent, utilities, telecommunications	$1,500
L1C1A	M8	24 - Printing, reproduction	$1,500
L1C1A	M8	26 - Supplies and materials	$3,200
L1C1A	M8	31 - Equipment, capitalized & noncap.	$5,300
		Sub total for Phase Class:	**$179,900**
L1C1A	M9	24 - Printing, reproduction	$1,600
L1C1A	M9	26 - Supplies and materials	$4,000
		Sub total for Phase Class:	**$5,600**
		Total for Task:	**$185,500**
		Total for Activity:	**$185,500**

	PERCENT
Pacific highly migratory pelagic fisheries	100.00%

	PERCENT
Pacific Coast Groundfish	0.00%
Western Pacific Pelagics	0.00%

CIATED LEGISLATION

	PERCENT
Magnuson act	
Marine Fisheries act	
Marine Mammal Protection act	

CIATED AGENCIES

VC1 Southwest Fisheries Science Center

ED STAFFING

MFS POS_ID	NMFS EMPLOYEE OR VACANT POSITION	PERCENT
01	KELLER, SUSAN	20.80%
14	SAKAGAWA, GARY	98.00%

Total for Activity: 1.188 FTE's

NOAA Marine Fisheries Service
Management Information System
Activity Narratives Report

'C421

'roblem Statement

This task monitors tuna fisheries production, developments, and trade on a global scale for analyses of stock condition and fisheries performance. Liaison with foreign scientists is an ongoing activity of this task as a means for securing fishery and scientific data on exploited stocks and for coordinating SWFSC scientists' involvement in international research projects.

1B. Objectives (What are the major objectives being pursued by this CYOP?)

a) To provide up-to-date fisheries evaluations and fishery management advice.

b) To conduct stock assessments.

c) To monitor tuna fisheries developments.

Methodology

Informal and formal agreements for exchange of fishery data and for cooperative scientific investigations are used. These agreements form a network that involves both international and domestic collaborators. The network is used by SWFSC to secure data and for maintaining collaborative research which contributes to the objective of monitoring and assessing stock condition of tuna and billfish stocks of interest to the U.S.

Justification

Activities are carried out to support U.S. formal and informal agreements with foreign countries and international organizations.

Linkages

This CYOP is linked to CYOP 401, 411, and 431 at SWC1, and CYOP 720, 721 and 722 at SWC2.

Contracts

None.

Products/Services

Results of this task are prepared for publication in scientific journals, internal reports and newsletters, and for oral presentations to NMFS managers, U.S. Commissions, etc. This task also serves as a public source for current data and information on the tuna fisheries and condition of the tuna stocks. A visible product of this task is the quarterly newsletter, Tuna Newsletter, which is available to collaborators and the public. Results of this task contribute to the NMFS strategic initiative of rebuilding U.S. fisheries by reducing overfishing and maintaining current productive fisheries.

Clients

The clients vary, depending on the information. The task results, however, receive wide distribution, both domestically and foreign, to tuna industry personnel, scientists, government officials, fishery managers and agency administrators.

CURRENT YEAR OPERATING PLAN - FORM 5
FY 1997

CYOP Number: SWC - 421 **Lab/Div:** SWFSC/PFRD

Title: Pelagic Fisheries Evaluation

Leader: Gary Sakagawa

MILESTONES, EVENTS AND ACTIVITIES SECTION

(For each Task # indicate M = Milestone, E = Event, A = Activity, Sequence #, Description of the Activity, Event or Milestone and the approximate dates of starting and finishing an Activity. Milestone and event dates should be indicated in the date finish column. Use additional pages if required.)

Task #	MEA	Seq #	Major Milestone, Event or Activity Descripition	Date Start	Date Finish
8L1C1AM8	A	1	Provide Scientific advice, as required for international agreements, and Council FMPs.	Oct 96	Sep 97
8L1C1AM8	A	2	Obtain fishery data from international sources for studies on tuna stock condition and for evaluation of fisheries condition.	Oct 96	Sep 97
8L1C1AM8	A	3	Coordinate SWFSC highly migratory species research and supervise maintenance of the global data base.	Oct 96	Sep 97
8L1C1AM8	A	4	Prepare paper on tuna fisheries of the Pacific for NCMC symposium.	Oct 96	Feb 97
8L1C1AM8	A	5	Organize 7th WPYRG meeting.	Oct 96	Jun 97
8L1C1AM8	M	6	Publish and distribute the report of the 5th meeting of the Western Pacific Yellowfin Tuna Research Group.	Oct 96	Dec 97
8L1C1AM8	M	7	Prepare report on the 1996 U.S. tuna purse seine fishery of the western Pacific for the consultation of parties to the South Pacific Tuna Treaty.	Oct 96	Apr 97

			Research Group.		
8L1C1AM9	A	9	Produce quarterly issues of Tuna Newsletter	Oct96	Sep97

Marine Mammal Division

NOAA Marine Fisheries Service
Management Information System
Activity Summary report

	Name:	Org Code:	Activity Type:
00	Marine Mammals Division Admin	FR2100	Programmatic Activity

ITY / LOCATION

FACILITY	NAME
SWC1	Southwest Fisheries Science Center

ETED AMOUNTS

LINE ITEM	PHASE	OBJECT CLASS	AMOUNT
8L1C4V50	50	11 - Personnel compensation (labor)	$102,000
8L1C4V50	50	12 - Personnel benefits	$23,500
8L1C4V50	50	21 - Travel, transportation of persons	$12,000
8L1C4V50	50	23 - Rent, utilities, telecommunications	$3,000
8L1C4V50	50	24 - Printing, reproduction	$1,000
8L1C4V50	50	25 - Contracts, contractual services	$27,300
8L1C4V50	50	26 - Supplies and materials	$1,000
8L1C4V50	50	31 - Equipment, capitalized & noncap.	$1,000
		Sub total for Phase Class:	**$170,800**
		Total for Task:	**$170,800**
		Total for Activity:	**$170,800**

	PERCENT
Pacific marine mammals	90.00%
Sea turtles	10.00%

OCIATED LEGISLATION

	PERCENT
Endangered Species act	
Marine Mammal Protection act	

OCIATED AGENCIES

AKC	Alaska Fisheries Science Center
AKR	Alaska Regional Office
FAO	UN FAO
HQ	NMFS Headquarters
IATTC	Inter-American Tropical Tuna Commission
ICES	Int. Council for Exploration of the Sea
NEC	Northeast Fisheries Science Center
NER	Northeast Regional Office
NMFS	National Marine Fisheries Service

NOAA	National Oceanic and Atmospheric Administration
NWC	Northwest Fisheries Science Center
NWR1	Northwest Regional Office
SEC	Southeast Fisheries Science Center
SER	Southeast Regional Office
SWR	Southwest Regional Office
USFWS	US Fish and Wildlife Service

SIGNED STAFFING

NMFS POS_ID	NMFS EMPLOYEE OR VACANT POSITION	PERCENT
1849	BROWNELL, ROBERT	100.00%
2547	HANDSCHUH, KAREN	100.00%
2397	SISSON, JOYCE	~~33.40%~~ 33.0

Total for Activity: 2.334 FTE's

SV :500

Problem Statement

This task involves the coordination of activities and dissemination of results of all Marine Mammal Division programs. It provides the best available scientific information on biological impacts of management practices by NMFS as mandated by the MMPA and the ESA and their subsequent revisions.

1B. Objectives (What are the major objectives being pursued by this CYOP?)

a) To coordinate Marine Mammal Division research activities.

b) To disseminate Marine Mammal Division research results to the public, Congress, Marine Mammal Commission, International Whaling Commission, industry, non-government organizations, other government agencies, international organizations, international resource managers, and NMFS Headquarters.

ethodology

By attending and conducting meetings and workshops regarding marine mammal populations and their ecological relationships in addition to providing reports on the results of research conducted by the Marine Mammal Division.

ıstification

NOAA Plan
Reducing bycatch
Research on bycatch by coastal gillnets, high seas driftnet, and tuna purse seines

Assist status of protected species
Obtain information for status of stock reports for all marine mammals in the Pacific Region of U.S. waters

Reduce marine mammal-fishery interactions
Obtain estimates of mortality for observed fisheries

Implement recover/conservation plans
Participate on recovery teams and panels for protected species

Take a proactive approach/prevent listings
Monitor marine mammal populations to obtain accurate information which can be used to assess their status

Expand ecosystem monitoring
Obtain habitat information for marine mammals

inkages

SWC1/MMD 510,520,530,540,550, 560

ontracts

1) Russian translation (3%)
2) NRC Post Doc (13%)

V :500

J oducts/Services

Products of this program are used by NMFS and other responsible organizations charged with drafting marine mammal management measures for U.S. and international resource managers.

(ients

The information generated is used by NMFS to evaluate management options for the protection of pinnipeds, and cetaceans, as well as ETP dolphin stocks, and other marine mammal stocks inhabiting waters of the U.S. Pacific Region. Up-to-date information on the condition of these marine mammal populations is a key requirement for the evaluation and selection of management options. Information is also provided to other U.S. and international agencies charged with the repsonsiblity of managing marine mammals.

CURRENT YEAR OPERATING PLAN - FORM 5
FY 1997

CYOP Number: SWC - S500 **Lab/Div:** SWC/MMD **Page:** 1

Title: Marine Mammal Administration

Leader: Brownell

MILESTONES, EVENTS AND ACTIVITIES SECTION

(For each Task # indicate M = Milestone, E = Event, A = Activity, Sequence #, Description of the Activity, Event or Milestone and the approximate dates of starting and finishing an Activity. Milestone and event dates should be indicated in the date finish column. Use additional pages if required.)

Task #	MEA	Seq #	Major Milestone, Event or Activity Descripition	Date Start	Date Finish
8L1C4V50	A		Participate in scientific committee meetings of the IWC, intercessional meetings, and Marine Mammal Commission meetings.		
8L1C4V50	A		Continue international research/management efforts on vaquita, baiji, Chilean dolphins, endangered populations of large whales, etc.		
8L1C4V50	A		Provide annual reports to the IWC, MMC, F/PR, ICES, on marine mammal research and results.		
8L1C4V50	A		Review NMFS marine mammal scientific research permits		
8L1C4V50	E		Conduct field work in Okhotsk Sea on bowhead whale stocks		Sep.

NOAA Marine Fisheries Service
Management Information System
Activity Summary report

	Name:	Org Code:	Activity Type:
510	Dolphin Stock Assessment Program	FR2100	Programmatic Activity

ITY / LOCATION

FACILITY	NAME
SWC1	Southwest Fisheries Science Center

ETED AMOUNTS

LINE ITEM	PHASE	OBJECT CLASS	AMOUNT
8L1C4V51	51	11 - Personnel compensation (labor)	$72,900
8L1C4V51	51	12 - Personnel benefits	$16,000
8L1C4V51	51	21 - Travel, transportation of persons	$3,000
8L1C4V51	51	26 - Supplies and materials	$1,000
		Sub total for Phase Class:	**$92,900**
		Total for Task:	**$92,900**
		Total for Activity:	**$92,900**

	PERCENT
Pacific marine mammals	95.00%
Sea turtles	5.00%

CIATED LEGISLATION

	PERCENT
Endangered Species act	
Marine Mammal Protection act	

CIATED AGENCIES

HQ	NMFS Headquarters
IATTC	Inter-American Tropical Tuna Commission
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
SWR	Southwest Regional Office

GNED STAFFING

NMFS POS_ID	NMFS EMPLOYEE OR VACANT POSITION	PERCENT
1144	GERRODETTE, TIMOTHY	100.00%
	Total for Activity:	**1 FTE's**

NOAA Marine Fisheries Service
Management Information System
Activity Narratives Report

:510

oblem Statement

This task involves research on the abundance and distribution of dolphins associated with the eastern tropical Pacific purse seine tuna fishery. It provides information needed to assess NMFS' management practices in this fishery, as mandated by the MMPA.

1B. Objectives (What are the major objectives being pursued by this CYOP?)

a) To asess the current status of all dolphin stocks affected by the ETP tuna purse seine fishery.

b) To use data collected on the ETP surveys to improve future cetacean surveys.

ethodology

a) The Bayesian model developed by Paul Wade in his thesis will be applied to combine mortality data with absolute and relative abundance estimates to estimate the current status of dolphin populations.

b) Data collected on MOPS (1986-1990) cruises will be analyzed to assess accuracy of distance estimation to marine mammal sightings, to produce improved methods of group size estimation, and to model factors affecting detection probability.

stification

Estimating ETP dolphin population sizes as mandated by the MMPA. Proposed international management of the ETP tuna fishery (Declaration of Panama and associated U.S. legislation requires estimates of dolphin population sizes, which may involve the NMFS.

nkages

SWC1/MMD 500,520, 530, 540, 550

ntracts

None

oducts/Services

Products from this task include a number of papers which will be used to assess the status of ETP dolphin populations, a paper on the abundance and distribution of cetaceans in the Gulf of California, and papers on current abundance of blue, and humpback whales as well as common dolphins off the coast of California will be prepare for peer reviewed journals.

ients

The results produced by the task are used by NMFS to evaluate management options for the protection of ETP dolphin stocks as mandated by the MMPA. Information is also used by the commercial tuna fishing industry and environmental groups.

CURRENT YEAR OPERATING PLAN - FORM 5
FY 1997

CYOP Number: SWC - S510 **Lab/Div:** SWC/MMD **Page:** 1

Title: MM Stock Assessment

Leader: Gerrodette

MILESTONES, EVENTS AND ACTIVITIES SECTION

(For each Task # indicate M = Milestone, E = Event, A = Activity, Sequence #, Description of the Activity, Event or Milestone and the approximate dates of starting and finishing an Activity. Milestone and event dates should be indicated in the date finish column. Use additional pages if required.)

Task #	MEA	Seq #	Major Milestone, Event or Activity Decripition	Date Start	Date Finish
8L1C4V51	A		Paper on status of ETP dolphin populations coauthored with Paul Wade		May
8L1C4V51	A		Plan and carry out line-transect survey for vaquitas		Sep.
8L1C4V51	A		Teach course on methods of estimating marine mammal abundance at CICIMAR, La Paz		Apr.
8L1C4V51	M		Produce paper on estimating relative abundance with sightability factors.		Jan.
8L1C4V51	A		Produce paper on accuracy of cetacean group size estimation (with Perryman)		
8L1C4V51	M		Produce paper on abundance of Hawaiian monk seals (with Bill Gilmartin and Thea Johanos)		Sep.
8L1C4V51	A		Conduct analysis of coastal ETP dolphin populations		
8L1C4V51	A		Produce paper on incorporating environmental information with abundance		
8L1C4V51	A		Produce estimates of abundance from early ETP surveys		

NOAA Marine Fisheries Service
Management Information System
Activity Summary report

	Name:	Org Code:	Activity Type:
20	Population Identification Program	FR2100	Programmatic Activity

ITY / LOCATION

FACILITY	NAME
SWC1	Southwest Fisheries Science Center

ETED AMOUNTS

LINE ITEM	PHASE	OBJECT CLASS		AMOUNT
8L1A5V52	52	11 - Personnel compensation (labor)		$219,600
8L1A5V52	52	12 - Personnel benefits		$48,300
8L1A5V52	52	21 - Travel, transportation of persons		$1,000
8L1A5V52	52	26 - Supplies and materials		$300
			Sub total for Phase Class:	**$269,200**
			Total for Task:	**$269,200**
8L1C4V	50	24 - Printing, reproduction		$6,000
			Sub total for Phase Class:	**$6,000**
			Total for Task:	**$6,000**
			Total for Activity:	**$275,200**

	PERCENT
Pacific marine mammals	100.00%

CIATED LEGISLATION

	PERCENT
Endangered Species act	
Marine Mammal Protection act	

CIATED AGENCIES

HQ	NMFS Headquarters
IATTC	Inter-American Tropical Tuna Commission
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
SWR	Southwest Regional Office

GNED STAFFING

NMFS POS_ID	NMFS EMPLOYEE OR VACANT POSITION	PERCENT
2584	CHIVERS, SUSAN	100.00%

1437	DIZON, ANDREW	100.00%
1843	ROBERTSON, KELLY	100.00%
0856	TAYLOR, BARBARA	100.00%

Total for Activity: **4 FTE's**

NOAA Marine Fisheries Service
Management Information System
Activity Narratives Report

520

Problem Statement

nformation regarding stock structure of human-affected species is necessary for their management. Depletion or elimination of local populations could result from the combination of high local human-caused mortality with low intermixing of the affected population with surrounding populations. Defining management units to be small lessens this risk of local depletion but may result in an economic burden to the fishing industry. Defining large management units has the opposite effect: low economic risks but high conservation ones. Our program integrates biological information with the conservation goals set down in the MMPA to provide results for management decisions about options and costs.

1B. Objectives (What are the major objectives being pursued by this CYOP?)

a) To use information from molecular genetics, distribution and abundance, life history, and morphology to make inferences about stock units.

b) To develop quantitative methods for integrating stock structure information and management-specified levels of risk.

Methodology

To define stocks, this program integrates data from a wide variety of sources and methodologies, such as distribution (from sighting surveys), mortality and abundance (from observer programs, surveys, etc.), and molecular genetics (from incidental take, biopsy, or salvage). These data form the basis for inferences regarding population structure and dispersal as well as for the risk analyses examining relative costs for making different decisions about how to sub-divide a species into management units.

Justification

NOAA Plan
Assist status of protected species - determining whether populations are significantly impacted by fisheries and other human activities.

MMPA and ESA

Linkages

SWC1/MMD 500,510, 530, 540

Contracts

None.

Products/Services

Written and oral reports of stock structure analyses of specific species.

Clients

The program's products are used by national and international management groups as part of the process when they make determinations as to whether given populations are significantly affected by human-caused mortality.

SOUTHWEST FISHERIES SCIENCE CENTER
CURRENT YEAR OPERATING PLAN - FORM 5
FY 1997

CYOP Number: SWC - S520 **Lab/Div:** SWC/MMD **Page:** 1

Title: Population Identity

Leader: Dizon

MILESTONES, EVENTS AND ACTIVITIES SECTION

(For each Task # indicate M = Milestone, E = Event, A = Activity, Sequence #, Description of the Activity, Event or Milestone and the approximate dates of starting and finishing an Activity. Milestone and event dates should be indicated in the date finish column. Use additional pages if required.)

Task #	MEA	Seq #	Major Milestone, Event or Activity Descripition	Date Start	Date Finish
8L1A5V52	A		Process and curate marine mammal biological specimens		
8L1A5V52	A		Investigate the stock structure of fishery impacted cetaceans and the molecular techniques which provide stock structure.		
8L1A5V52	M		Report on harbor seal stock and beluga structure using microsatellite data.		Sep.
8L1A5V52	M		Report on sperm whale abudnance and stock structure research cruise.		Sep.

NOAA Marine Fisheries Service
Management Information System
Activity Summary report

	Name:	Org Code:	Activity Type:
30	Cetacean Ecology Program	FR2100	Programmatic Activity

ITY / LOCATION

FACILITY	NAME
SWC1	Southwest Fisheries Science Center

ETED AMOUNTS

LINE ITEM	PHASE	OBJECT CLASS	AMOUNT
8L1A6A53	53	11 - Personnel compensation (labor)	$250,900
8L1A6A53	53	12 - Personnel benefits	$55,200
8L1A6A53	53	21 - Travel, transportation of persons	$6,000
8L1A6A53	53	23 - Rent, utilities, telecommunications	$2,000
8L1A6A53	53	25 - Contracts, contractual services	$6,200
8L1A6A53	53	26 - Supplies and materials	$3,500
8L1A6A53	53	31 - Equipment, capitalized & noncap.	$2,000
		Sub total for Phase Class:	**$325,800**
		Total for Task:	**$325,800**
		Total for Activity:	**$325,800**

	PERCENT
Pacific marine mammals	90.00%
Sea turtles	10.00%

OCIATED LEGISLATION

	PERCENT
Endangered Species act	
Marine Mammal Protection act	

OCIATED AGENCIES

HQ	NMFS Headquarters
IATTC	Inter-American Tropical Tuna Commission
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration

IGNED STAFFING

NMFS POS_ID	NMFS EMPLOYEE OR VACANT POSITION	PERCENT
1729	FIEDLER, PAUL	100.00%
1909	HOLLAND, ROBERT	100.00%

1828	PHILBRICK, VALERIE	100.00%
2474	PITMAN, ROBERT	100.00%
0883	REILLY, STEPHEN	100.00%

Total for Activity: 5 FTE's

NOAA Marine Fisheries Service
Management Information System
Activity Narratives Report

C530

Problem Statement

This program addresses the scientific and management aspects of physical and biological habitat use by marine mammals and endangered species. This program will examine feeding habitat of blue and sei whales in near-shore Southern California waters in order to determine which areas are important to their recovery.

1B. Objectives (What are the major objectives being pursued by this CYOP?)

a) To (in the near-term) quantify the contribution of habitat use patterns and variability to the observed variance of our sighting surveys, and thus do a better job of estimating abundance, detecting trends, and designing more efficient surveys.

b) To(in the long-term) develop a model-based system with realistic data requirements that includes habitat and multispecies components,
and.

c) To apply this system to the management of marine mammals and protected species.

Methodology

To obtain habitat information we have expanded the scope of data collection during marine mammal sighting surveys to include observations on oceanography and environmental biology. Where possible we supplement these data with information from existing NOAA and other data bases. Our analytic approach to date has been primarily empirical, using statistical techniques to quantify multivariate patterns. In addition to the general approach outlined for the Dolphin Ecology Program, WHAPS will use acoustic techniques to examine meso-scale prey distribution, and satellite tagging of whales to see how they utilize resources.

Justification

The MMPA and ESA both mandate an "ecosystem approach" be taken when managing marine mammals and protected species, but it is not yet clear how this can or should be done. As stated above (Objectives) this
program is designed specifically to fill that gap, first by quantifying habitat use patterns, and later multispecies patterns, and by providing quantitative advice from these efforts. Without this program (or another very much like it) we would be in the disadvantageous position of attempting to monitor and manage marine mammal and protected species populations in nearly complete ignorance of the effects of the environment on our information and decisions.

Linkages

Other MMD programs in field studies (list latest names for Jay's and Tim's programs); Other Divisions of the Center in the FY95 cruise; NOS for ship time.

Contracts

Three Marine Mammal Observers to supply data collected during WHAPS survey August 1996.

Marine Mammal Satellite Tagging data MMPA Permit Required.

Products/Services

Our results are used in combination with those from the other SWFSC/MMD programs to determine the abundance (and when possible) trends in marine mammal and endangered species populations within the geographic purvue of the Center.

M:530

Clients

Our clients include the Southwest Regional office of NMFS, the Office of Protected Resources, and the US Marine Mammal Commission. All require informed advice on status and trends of populations to make management decisions.

Our 'suppliers' include the other programs of the Division for abundance estimates and related data, the NOS for ship time, NESDIS (on occasion) for information from oceanographic data bases.

SOUTHWEST FISHERIES CENTER

CURRENT YEAR OPERATING PLAN - FORM 5
FY 1997

CYOP Number: SWC - S530 **Lab/Div:** SWC/MMD **Page:** 1

Title: Ecology Program

Leader: Reilly

MILESTONES, EVENTS AND ACTIVITIES SECTION

(For each Task # indicate M = Milestone, E = Event, A = Activity, Sequence #, Description of the Activity, Event or Milestone and the approximate dates of starting and finishing an Activity. Milestone and event dates should be indicated in the date finish column. Use additional pages if required.)

Task #	MEA	Seq #	Major Milestone, Event or Activity Decripition	Date Start	Date Finish
8L1A6A53	M		Produce cruise report on WHAPS 96		Nov.
8L1A6A53	M		Submit paper on 95 and 96 WHAPS surveys to the Journal of Deep Sea Research		Jun.

NOAA Marine Fisheries Service
Management Information System
Activity Summary report

/:	Name:	Org Code:	Activity Type:
540	Coastal Marine Mammal Program	FR2100	Programmatic Activity

ITY / LOCATION

FACILITY	NAME
SWC1	Southwest Fisheries Science Center

GETED AMOUNTS

LINE ITEM	PHASE	OBJECT CLASS	AMOUNT
8L1A5V54	54	11 - Personnel compensation (labor)	$166,100
8L1A5V54	54	12 - Personnel benefits	$36,500
8L1A5V54	54	21 - Travel, transportation of persons	$5,000
8L1A5V54	54	25 - Contracts, contractual services	$5,000
8L1A5V54	54	26 - Supplies and materials	$2,000
		Sub total for Phase Class:	**$214,600**
		Total for Task:	**$214,600**
		Total for Activity:	**$214,600**

	PERCENT
Pacific marine mammals	100.00%

OCIATED LEGISLATION

	PERCENT
Endangered Species act	
Marine Mammal Protection act	

OCIATED AGENCIES

HQ	NMFS Headquarters
NMFS	National Marine Fisheries Service
SWR	Southwest Regional Office

IGNED STAFFING

NMFS POS_ID	NMFS EMPLOYEE OR VACANT POSITION	PERCENT
1285	BARLOW, JAY	100.00%
2230	FORNEY, KARIN	100.00%
2520	LOWRY, MARK	100.00%
	Total for Activity:	**3 FTE's**

NOAA Marine Fisheries Service
Management Information System
Activity Narratives Report

C540

Problem Statement

This task investigates changes in coastal marine mammal populations associated with human activities (e.g., commercial fisheries, recovery from commercial whaling, research, etc). This task provides information so that the status of stocks of certain species can be determined, allowing NMFS to fulfill its requirements under the MMPA & ESA.

1B. Objectives (What are the major objectives being pursued by this CYOP?)

a) To monitor marine mammal populations.
b) To monitor the effect of fishery and other human caused mortality on marine mammal populations.
c) To develop methods of determining the status of marine mammal stocks.

Methodology

Data from ship surveys will be used to estimate the abundance of dolphins, porpoise, and whales in waters off California, Oregon and Washington. Newly, developed methods will be used to acoustically detect deep diving whales to improve abundance estimates. Aerial photographic surveys will be used to monitor the abundance of California sea lions and elephant seals. Aerial surveys will be used to continue monitoring the central and northern California harbor porpoise populations. Photo-identification studies will be continued for blue, humpback, and killer whales. Estimates of marine mammal mortality will be made based on NMFS observer program data and CDFG fishing effort estimates for California gillnet fisheries.

Justification

Strategic Plan
T2A - Assist status of protected species

Legislation
MMPA Reauthorized 1993 - section 117 and 118
ESA - Recovery Plans

Linkages

SWC1/MMD 500, 520, 530, 550

Contracts

1) Air time - Elephant seal census (7%)
2) Air time - California sea lion census (4%)

Products/Services

The information produced by the program will primarily be used by NMFS management to 1) develop actions to protect marine mammals in California from unnecessary or excessive fishery mortality, 2) determine allowable takes for display, research and fisheries, 3) evaluate the effects of incidental take on marine mammals, and 4) to develop recovery plans for endangered whales. This task is responsible for compiling stock assessment reports for all marine mammal stocks inhabiting the waters of the Pacific Region.

Clients

Products provided by this program are used by NMFS offices which are responsible for controlling the take of marine mammals.

SOUTHWEST FISHERIES SCIENCE CENTER
CURRENT YEAR OPERATING PLAN - FORM 5
FY 1997

CYOP Number: SWC - S540 **Lab/Div:** SWC/MMD

Title: Coastal Marine Mammals

Leader: Jay Barlow

MILESTONES, EVENTS AND ACTIVITIES SECTION

(For each Task # indicate M = Milestone, E = Event, A = Activity, Sequence #, Description of the Activity, Event or Milestone and the approximate dates of starting and finishing an Activity. Milestone and event dates should be indicated in the date finish column. Use additional pages if required.)

Task #	MEA	Seq #	Major Milestone, Event or Activity Descripition	Date Start	Date Finish
8L1A5V54	A		Conduct ship survey to estimate the abundance of all cetaceans in California waters (every 4 yrs)		
8L1A5V54	A		Elephant seal aerial photographic census and ground counts (Biennial)		
8L1A5V54	A		California sea lion aerial photographic census and ground counts	Jul.	Oct.
8L1A5V54	A		Continue mark-recapture estimation for blue and humpback whales off California from CAMMS data and other photo-ID work.		
8L1A5V54	M		Complete Stock Assessment Repoorts Draft to Fed. Reg.		Dec.
8L1A5V54	M		Complete ORCAWALE Survey Cruise Report		Jan.
8L1A5V54	M		Report on incidental mortality of marine mammals in the California gillnet fisheries		May
8L1A5V54	A		Assist Scientific Review Groups established under MMPA (1995-1997)		

NOAA Marine Fisheries Service
Management Information System
Activity Summary report

	Name:	Org Code:	Activity Type:
:50	**Dolphin Safe Technologies Program**	**FR2100**	**Programmatic Activity**

ITY / LOCATION

FACILITY	NAME
SWC1	Southwest Fisheries Science Center

ETED AMOUNTS

LINE ITEM	PHASE	OBJECT CLASS		AMOUNT
8L1ADTPA	PA	11 - Personnel compensation (labor)		$124,700
8L1ADTPA	PA	12 - Personnel benefits		$27,400
8L1ADTPA	PA	21 - Travel, transportation of persons		$15,000
8L1ADTPA	PA	24 - Printing, reproduction		$2,500
8L1ADTPA	PA	25 - Contracts, contractual services		$47,900
8L1ADTPA	PA	26 - Supplies and materials		$10,000
			Sub total for Phase Class:	**$227,500**
			Total for Task:	**$227,500**
8L1C4V50	50	31 - Equipment, capitalized & noncap.		$10,000
			Sub total for Phase Class:	**$10,000**
			Total for Task:	**$10,000**
			Total for Activity:	**$237,500**

	PERCENT
Pacific marine mammals	100.00%

CIATED LEGISLATION

	PERCENT
Endangered Species act	
Marine Mammal Protection act	

CIATED AGENCIES

HQ	NMFS Headquarters
IATTC	Inter-American Tropical Tuna Commission
NMFS	National Marine Fisheries Service
SWR	Southwest Regional Office

GNED STAFFING

NMFS POS_ID	NMFS EMPLOYEE OR VACANT POSITION	PERCENT

2157	EDWARDS, ELIZABETH	100.00%
1865	OLIVER, CHARLES	100.00%

Total for Activity: **2 FTE's**

C550

Problem Statement

This task is responsible for investigating and developing methods for detecting and capturing large yellowfin tuna in the ETP without encircling dolphins. The research supported by this task was reviewed by a panel of experts and has been published in the Federal Register with requests for comments during both FY92 and FY93.

1B. Objectives (What are the major objectives being pursued by this CYOP?)

a) To develop alternative fishing methods for catch large yellowfin tuna without encircling dolphin.

b) To investigate methods for locating large yellowfin tuna not associated with dolphin.

c) To investigate possible adverse effects on marine mammals, of dolphin-safe detection or capture methods.

Methodology

During FY96, projects not yet completed from previous years will be continued and new projects will be initiated, based on results of the 2nd Dolphin-Safe Research Planning Workshop completed March 1994. Dolphin-Safe Research during FY96 -- will have three major foci: 1) evaluation of results from contract work completed during FY95 to determine the optimal detection method for locating yellowfin tuna not associated with dolphins in the ETP, 2) planning of a research survey to determine abundance of large yellowfin in relation to dolphin distribution, and 3) investigation of potential detrimental effects of detection technologies on dolphins in the ETP, specifically acoustic pollution from acoustic fish detection devices and eye damage from laser detection devices.

Justification

The International Dolphin Conservation Act of 1992 amended the General Permit authorized to the American Tunaboat Association which regulates the take of dolphin during fishing activities under the Marine Mammal Protection Act. It also placed new restrictions on the sale of tuna in the U.S. As of 1 June 1994, it is unlawful to sell, purchase, or offer for sale, transport, or ship any tuna or tuna product that is not dolphin-safe (tuna caught without encircling dolphin). The National Oceanic and Atmospheric Administration Authorization Act authorized funding to develop dolphin safe methods which is consistent with the NOAA Plan to reduce marine mammal/fishery interactions.

Linkages

SWC1/MMD CYOP 500, 510, 520, 530

Contracts

a) Acoustic modeling to detect schools of large yellowfin tuna in the ETP by the tuna purse seine fishery.

b) Optical modeling for airborne systems to detect schools of large yellowfin tuna in the ETP by the tuna purse seine fishery.

c) Radar modeling to detect schools of large yellowfin tuna in the ETP by the tuna purse seine fishery.

d) Potential effects of acoustical and optical detection devices on marine mammals.

e) Statistical analysis of new Dolphin-Safe Technologies.

Products/Services

Peer-reviewed scientific papers, reports, workshop reports, and contract reports.

V 2550

(ients

Products are provided to the SWR, F/PR, State Department, tuna industry, environmental community, and IATTC.

CURRENT YEAR OPERATING PLAN - FORM 5
FY 1997

CYOP Number: SWC - S550 **Lab/Div:** SWC/MMD

Title: Dolphin Safe Research

Leader: Edwards

MILESTONES, EVENTS AND ACTIVITIES SECTION

(For each Task # indicate M = Milestone, E = Event, A = Activity, Sequence #, Description of the Activity, Event or Milestone and the approximate dates of starting and finishing an Activity. Milestone and event dates should be indicated in the date finish column. Use additional pages if required.)

Task #	MEA	Seq #	Major Milestone, Event or Activity Descripition	Date Start	Date Finish
8L1ADTPA	E		Prepare annual report to Congress as required by the International Dolphin Conservation Act of 1992		
8L1ADTPA	M		Report on the potential acoustic damage to marine mammals from tuna detection technology		Aug.

NOAA Marine Fisheries Service
Management Information System
Activity Summary report

/:	Name: MARINE MAMMAL	Org Code:	Activity Type:
560	Photogrammetry	FR2100	Programmatic Activity

ITY / LOCATION

FACILITY	NAME
SWC1	Southwest Fisheries Science Center

GETED AMOUNTS

LINE ITEM	PHASE	OBJECT CLASS	AMOUNT
8L1A5V51	51	11 - Personnel compensation (labor)	$133,800
8L1A5V51	51	12 - Personnel benefits	$29,400
8L1A5V51	51	21 - Travel, transportation of persons	$5,000
8L1A5V51	51	25 - Contracts, contractual services	$5,000
8L1A5V51	51	26 - Supplies and materials	$3,000
		Sub total for Phase Class:	**$176,200**
		Total for Task:	**$176,200**
		Total for Activity:	**$176,200**

	PERCENT
Pacific marine mammals	100.00%

	PERCENT
Atlantic Coast Red Drum	0.00%

CIATED LEGISLATION

	PERCENT
Endangered Species act	
Marine Mammal Protection act	

CIATED AGENCIES

HQ	NMFS Headquarters
IATTC	Inter-American Tropical Tuna Commission
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
SWR	Southwest Regional Office

GNED STAFFING

NMFS POS_ID	NMFS EMPLOYEE OR VACANT POSITION	PERCENT

0585	GILPATRICK, JAMES	100.00%
2537	LYNN, MORGAN	100.00%
0740	PERRYMAN, WAYNE	100.00%

Total for Activity: **3 FTE's**

NOAA Marine Fisheries Service
Management Information System
Activity Narratives Report

:560

oblem Statement

Management of marine mammal populations that are impacted by human activities requires information regarding population size and stock structure. This program provides counts of cetaceans and pinnipeds for stock assessments and morphometric information for species identification and stock structure analyses. These data provide the basis for assessments of pinnipeds and cetaceans along the California Coast and farther offshore.

1B. Objectives (What are the major objectives being pursued by this CYOP?)

a) To provide support for the Coastal Marine Mammal Program by obtaining aerial photographs of cetaceans and pinnipeds for assessment, abundance estimation, and calibration of observer estimates.

b) To develop photogrammetric methods for determination of stock discretness of large and small cetaceans.

c) To conduct annual census of northbound migrating gray whale cow/calf pairs as an index of calf production.

d) To conduct experiments to test hypotheses concerning day/night migration rates of gray whales.

e) To collect and examine morphometric information on blue whales from the California Channel Islands for stock identification and examination of reproductive parameters.

f) Continue to examine the application of classified military assets to marine mammal research requirement.

ethodology

This program is designed to provide data (counts, measurements) from remote systems (cameras, thermal sensors, classified sources) for use in population assessments and stock determinations for pinnipeds and for large and small cetaceans. This program collects aerial photographs used to monitor population sizes for pinnipeds that breed on the California Channel Islands. Vertical aerial photographs are used to calibrate school size estimate for cetacean surveys and morphometric measurements from these images are used for stock determinations. Vertical images are also used to identify individual large cetaceans for population size estimation, determination of reproductive and growth parameters. This program measures day and night migration rates for California gray whales using thermal sensors to provide corrections to population estimates derived from visual census data. This program also conducts and annual shore based census of northbound gray whale cow/calf pairs as an index of calf production. In addition, this program examines classified military technologies for application to marine mammal research.

ıstification

NOAA Plan
Assist status of protected species - determining whether populations are significantly impacted by fisheries and other human activities

MMPA and ESA

inkages

SWC1/MMD 500, 510, 520, 530, 540, SWC2, NMML, ADF&G

ontracts

Contract Air

M:560

Products/Services

Written and oral reports of population size and stock structure are submitted to scientific journals and presented at scientific meetings.

Clients

The program's products are used by other programs within the Division, by other Centers, as well as national and international management groups.

SOUTHWEST FISHERIES SCIENCE CENTER
CURRENT YEAR OPERATING PLAN - FORM 5
FY 1997

CYOP Number: SWC - S560 **Lab/Div:** SWC/MMD

Title: Photogrammetry

Leader: Perryman

MILESTONES, EVENTS AND ACTIVITIES SECTION

(For each Task # indicate M = Milestone, E = Event, A = Activity, Sequence #, Description of the Activity, Event or Milestone and the approximate dates of starting and finishing an Activity. Milestone and event dates should be indicated in the date finish column. Use additional pages if required.)

Task #	MEA	Seq #	Major Milestone, Event or Activity Descripition	Date Start	Date Finish
8L1A5V51	E		Investigate migration patterns for the California gray whale	Apr.	Jun.
8L1A5V51	A		Provide support for the Coastal Marine Mammal Program surveys and census		
8L1A5V51	E		Investigate northeast Pacific blue whale population biology using photogrammetric techniques	Jun.	Sep.
8L1A5V51	E		Participate in NMML investigation of southbound migration of California gray whales	Jan	Mar
8L1A5V51	A		Investiage geographic stock structure in eastern Pacific dolphin populations		
8L1A5V51	M		Report on 1997 northbound gray whale survey		Sep.
8L1A5V51	M		Report on the 1994-96 northbound gray whale surveys.		Apr.

Antarctic Ecosystem Research Group

NOAA Marine Fisheries Service
Management Information System
Activity Summary report

y:	Name:	Org Code:	Activity Type:
601	Antarctic Ecosystem Research Group	FR2100	Programmatic Activity

LITY / LOCATION

FACILITY	NAME
AKC	Alaska Fisheries Science Center
SWC1	Southwest Fisheries Science Center

GETED AMOUNTS

LINE ITEM	PHASE	OBJECT CLASS	AMOUNT
8L1A6H60	60	11 - Personnel compensation (labor)	$167,000
8L1A6H60	60	12 - Personnel benefits	$36,800
8L1A6H60	60	21 - Travel, transportation of persons	$31,000
8L1A6H60	60	22 - Transportation of things	$10,000
8L1A6H60	60	23 - Rent, utilities, telecommunications	$4,000
8L1A6H60	60	26 - Supplies and materials	$1,000
8L1A6H60	60	31 - Equipment, capitalized & noncap.	$1,000
8L1A6H60	60	41 - Grants, subsidies	$153,000
		Sub total for Phase Class:	**$403,800**
		Total for Task:	**$403,800**
8L1A6H61	61	11 - Personnel compensation (labor)	$131,900
8L1A6H61	61	12 - Personnel benefits	$29,000
8L1A6H61	61	21 - Travel, transportation of persons	$10,000
8L1A6H61	61	22 - Transportation of things	$10,000
8L1A6H61	61	26 - Supplies and materials	$3,500
8L1A6H61	61	31 - Equipment, capitalized & noncap.	$8,000
		Sub total for Phase Class:	**$192,400**
		Total for Task:	**$192,400**
8L1A6H62	62	11 - Personnel compensation (labor)	$37,400
8L1A6H62	62	22 - Transportation of things	$5,000
8L1A6H62	62	26 - Supplies and materials	$900
		Sub total for Phase Class:	**$43,300**
		Total for Task:	**$43,300**
8L1A6H63	63	11 - Personnel compensation (labor)	$32,500
8L1A6H63	63	12 - Personnel benefits	$7,200
8L1A6H63	63	21 - Travel, transportation of persons	$56,000
8L1A6H63	63	22 - Transportation of things	$5,000
8L1A6H63	63	24 - Printing, reproduction	$4,000
8L1A6H63	63	25 - Contracts, contractual services	$215,400
8L1A6H63	63	26 - Supplies and materials	$5,000
8L1A6H63	63	31 - Equipment, capitalized & noncap.	$5,000

			Sub total for Phase Class:	$330,100
			Total for Task:	$330,100
8L1A6H64	64	25 - Contracts, contractual services		$145,100
8L1A6H64	64	26 - Supplies and materials		$17,400
8L1A6H64	64	31 - Equipment, capitalized & noncap.		$5,000
			Sub total for Phase Class:	$167,500
			Total for Task:	$167,500
			Total for Activity:	$1,137,100

SOCIATED LEGISLATION

	PERCENT
Endangered Species act	
Marine Mammal Protection act	
AMLR	

A OBJECTIVES

		PERCENT
006	Develop and implement conservation programs	50.00%
008	Protect, cnsrv, restor cstal habitats/biodiversity	25.00%

SOCIATED AGENCIES

AKC	Alaska Fisheries Science Center
DOS	Department of State
NSF	National Science Foundation
SWC1	Southwest Fisheries Science Center

IGNED STAFFING

NMFS POS_ID	NMFS EMPLOYEE OR VACANT POSITION	PERCENT
1036	ARMSTRONG, WESLEY	100.00%
0723	DEMER, DAVID	100.00%
0218	HEWITT, ROGER	100.00%
2367	HOLT, RENNIE	100.00%
2463	MARTIN, JANE	100.00%
2448	SEXTON, STEPHANIE	100.00%
	Watters, George	100.00
	Total for Activity:	8 FTE's
		7

C601

roblem Statement

The U.S. Antarctic Marine Living Resources (AMLR) program provides information needed to formulate U.S. policy on conservation and international management of resources living in the oceans surrounding Antarctica. The program was established by Public Law 98-623 to provide advice to the U.S. delegation to the Convention for the Conservation of Antarctic Marine Living Resources (CCAMLR), part of the Antarctic Treaty System. The AMLR program is managed by the Antarctic Ecosystem Research Group located at the Southwest Fisheries Science Center.

1B. Objectives (What are the major objectives being pursued by this CYOP?)

a) To restore depleted finfish populations and maintain other finfish, krill and crab populations at sustainable levels in accord with CCAMLR principles and regulations.

lethodology

The AMLR program will be divided into five tasks: (1) Ecosystem Monitoring will coordinate and review field research on krill predators, conduct AMLR Interagency Review Panel and pre-CCAMLR meetings, coordinate scientific presentations and participation at CCAMLR meetings, and update the Program Development Plan. (2) Antarctic Krill Stock Assessment will conduct acoustic surveys of krill, prepare working papers and manuscripts, and participate in CCAMLR Krill Working Group Meeting. (3) Fish/Krill Population Dynamics will review data and papers on the status of fish stocks submitted to CCAMLR, collect data and prepare analysis on Antarctic crab populations, and participate in CCAMLR Stock Assessment meeting. (4) Field Operations will design, coordinate and conduct prey/oceanographic activities undertaken during the field season in accordance with the long-range Antarctic research strategy. (5) Predator monitoring will design, coordinate and conduct predator (seal and penguins) and crab activities undertaken during the field season.

ıstification

The U.S. AMLR program is a directed research program designed to complement the U.S. Antarctic Program (USAP) of basic research managed by the National Science Foundation (NSF), with the goal of maximizing the productivity of the overall U.S. science effort in Antarctica through close coordination in planning and cooperative work between the two programs. The Antarctic Marine Living Resources Convention Act, P.L. 98-623, Title III, was signed into law in 1984, implementing the Convention. Congress found that both directed and basic research programs concerning the marine living resources of Antarctica are essential to achieving the U.S. goal of effective implementation of the Convention. Section 312 (B) of the act states that:

"The Secretary of Commerce, in consultation with the Director of the NSF, the Secretary of State and the heads of other appropriate Federal agencies, shall design and conduct a program of directed scientific research coordinated with the U.S. Antarctic Program."

nkages

National Marine Mammal Lab (AKC), Department of State, National Science Foundation, Marine Mammal Commission, various non-government organizations interested in Antarctic conservation issues, commercial fishing industry, academic investigators at several universities receiving funding from U.S. AMLR program.

:601

)ntracts

Phytoplankton studies - $73.4k
Physical oceanography studies - $69.1k
Krill demographic studies - $73.0k
Penguin studies at Palmer Station - $40.0k
Seabird studies at Cape Shirreff - $76.8k
Predator studies support - $8.2k
Campsite construction - $20.0k

·oducts/Services

Reports and technical papers are prepared to meet U.S. obligations to the Convention for the Conservation of Antarctic Marine Living Resources (CCAMLR). Scientific papers are prepared for publication. AERG staff and invited consultants will participate in CCAMLR working groups and other international meetings to address conservation issues and assess relevant scientific information.

lients

Information provided by the tasks will be used by the State Department to formulate U.S. positions on Antarctic resource conservation, by the U.S. AMLR program to adjust its long-range research strategy, by the CCAMLR Scientific Committee, and by other governments and researchers working in the Antarctic.

SOUTHWEST FISHERIES SCIENCE CENTER
CURRENT YEAR OPERATING PLAN - FORM 5
FY 1997

CYOP Number: SWC - 601 **Lab/Div:** AERG

Title: Antarctic Ecosystem Research

Leader: R. Holt

MILESTONES, EVENTS AND ACTIVITIES SECTION

(For each Task # indicate M = Milestone, E = Event, A = Activity, Sequence #, Description of the Activity, Event or Milestone and the approximate dates of starting and finishing an Activity. Milestone and event dates should be indicated in the date finish column. Use additional pages if required.)

Task #	MEA	Seq #	Major Milestone, Event or Activity Descripition	Date Start	Date Finish
8L1A6H60	E	1	Conduct pre-CCAMLR meetings.	5/97	9/97
8L1A6H60	A	2	Coordinate scientific presentations and participation at CCAMLR Working Groups, Scientific Committee, and Commission meetings.	10/96	7/97
8L1A6H60	A	3	Formulate US advice regarding long-term direction CCAMLR should pursue to manage Antarctic crab, fish, and krill fisheries.	10/96	9/97
8L1A6H60	A	4	Coordinate predator/prey modeling studies, penguin research at Palmer Station, and predator monitoring studies at Seal Island and Cape Shirreff.	10/96	9/97
8L1A6H60	M	5	Plan and execute all arrangements and host CCAMLR WG-EMM meeting.	10/96	8/97

			CCAMLR's Antarctic Peninsula coordination meeting.		
8L1A6H60	M	7	Establish field camp site at Cape Shirreff.	10/96	4/97
8L1A6H60	A	8	Participate in field season.	1/97	4/97
8L1A6H60	E	9	Participate in US GLOBEC program planning.	As	req'd
8L1A6H60	A	10	Manage AERG program budget, personnel, and research activities.	10/96	9/97
8L1A6H60	M	11	Review Program priorities, formulate long-term objectives, and complete Program Development Plan.	12/96	6/97
8L1A6H61	A	12	Design, coordinate and conduct 1996/97 field work; analyze acoustic data.	10/96	3/97
8L1A6H61	M	13	Write summaries of field research activities and results for AMLR Field Season Report and U.S. Antarctic Journal.	3/97	8/98
8L1A6H61	A	14	Investigate linkages between krill availability and predator performance.	10/96	9/97
8L1A6H61	E	15	Prepare working papers for CCAMLR meetings and participate in CCAMLR krill management meetings.	1/97	8/97
8L1A6H61	A	16	Enhance capabilities of SWFSC acoustic system.	10/96	9/97
8L1A6H61	A	17	Investigate methods for classification of acoustic targets.	10/96	9/97
8L1A6H61	A	18	Describe errors and biases associated with echo integration methodology.	10/96	9/97
8L1A6H61	M	19	Host CCAMLR meetings.	5/97	7/97

			capability including procurement of equipment & supplies, staffing, at-sea sampling, and specimen archiving.		
8L1A6H62	A	21	Model Antarctic crab population dynamics.	10/96	9/97
8L1A6H62	A	22	Review papers on status of fish stocks submitted to CCAMLR.	6/97	9/97
8L1A6H62	A	23	Formulate advice concerning US guidance to CCAMLR for management of Antarctic crab and fish stocks.	10/96	9/97
8L1A6H62	M	24	Plan and execute all arrangements and host CCAMLR's subgroup on statistics.	10/96	8/97
8L1A6H62	M	25	Attend and participate in CCAMLR Scientific Committee and Commission meetings and Working Group on Stock Assessment.		10/96
8L1A6H62	A	26	Investigate use of satellite imagery to describe ice-edge dynamics and climatology.	10/96	9/97
8L1A6H63	M	27	Evaluate research proposals and negotiate contracts and/or cooperative agreements.		6/97
8L1A6H63	A	28	Monitor and coordinate coop. agree. for studies on physical oceanography, primary production, and krill demographics.	10/96	9/97
8L1A6H63	M	29	Prepare and distribute draft and final cruise plans.		12/96
8L1A6H63	A	30	Manage cruise logistics.	10/96	5/97
8L1A6H63	M	31	Assemble and edit cruise report.	5/97	9/97
8L1A6H64	M	32	Plan, write, and implement permits to specify research to be conducted under the MMPA and to write report of field activities undertaken relative to the MMPA.	10/96	9/97

Honolulu Laboratory

NOAA Marine Fisheries Service
Management Information System
Activity Summary report

y:	Name:	Org Code:	Activity Type:
:701	Fishery Monitoring and Economics	FR2200	Programmatic Activity

LITY / LOCATION

FACILITY	NAME
SWC2	Honolulu Lab

GETED AMOUNTS

LINE ITEM	PHASE	OBJECT CLASS	AMOUNT
8L1C2A74	74	11 - Personnel compensation (labor)	$175,800
8L1C2A74	74	12 - Personnel benefits	$78,300
8L1C2A74	74	21 - Travel, transportation of persons	$4,700
8L1C2A74	74	26 - Supplies and materials	$3,000
		Sub total for Phase Class:	**$261,800**
		Total for Task:	**$261,800**
8L1C2A76	76	11 - Personnel compensation (labor)	$125,900
8L1C2A76	76	12 - Personnel benefits	$56,000
8L1C2A76	76	26 - Supplies and materials	$2,000
		Sub total for Phase Class:	**$183,900**
		Total for Task:	**$183,900**
		Total for Activity:	**$445,700**

	PERCENT
Western Pacific invertebrate fisheries	10.00%
Western Pacific bottomfish and armorhead fisheries	10.00%
Pacific highly migratory pelagic fisheries	70.00%
Sea turtles	10.00%

	PERCENT
Western Pacific Bottomfish and Seamount Groundfish	10.00%
Western Pacific Crustaceans	15.00%
Western Pacific Pelagics	75.00%

OCIATED LEGISLATION

	PERCENT
Endangered Species act	
Magnuson act	
Marine Fisheries act	

Marine Mammal Protection act

)CIATED AGENCIES

SWC1	Southwest Fisheries Science Center
SWR	Southwest Regional Office
WPFMC	Western Pacific Fishery Management Council

GNED STAFFING

CABACUNGAN FRANK
DOWDELL FREDERICK
ITO RUSSELL
KAWAMOTO KURT
MIYAMOTO BRENT
POOLEY SAMUEL
TAGAMI DARRYL
TSUKANO LUCILLE

8 FTE

NOAA Marine Fisheries Service
Management Information System
Activity Narratives Report

:701

oblem Statement

FMI is the focal point for data collection and reporting for Federally managed domestic fisheries in Hawaii, as well as economic and operational analysis directed towards fisheries management. The information compiled and analysis prepared by FMI staff is used for domestic fisheries management in Hawaii, as well as for basic biological research, and fisheries management assistance to American Samoa, Guam, Hawaii, and the Northern Marianas.

1B. Objectives (What are the major objectives being pursued by this CYOP?)

a) To provide fisheries-dependent data for biological and economic research.

b) To provide reports on the status of landings and fishing activities.

c) To conduct economic and operational research.

d) To coordinate fisheries data management and technical assistance in the Western Pacific region.

ethodology

Fisheries data are collected through Federal logbook programs, shoreside monitoring of landings, market sampling, and special surveys of fishery participants. Data are compiled in integrated data bases and made available to other users through the Laboratory's data manager. Status reports are prepared by FMI staff on each monitored fishery. Data are also aquired by research programs at the Honolulu Laboratory and through data share agreements with other agencies.
Economic research includes cost-earnings analysis of the major commercial fleets, as well as studies on operational dynamics and seafood markets. The FMI economist also serves as principal investigator for contract socioeconomic research. FMI staff serve on plan monitoring teams of the Western Pacific Regional Fishery Management Council, as well as other scientific and advisory committees, including the WPacFin Fishery Data Coordinating Committee.

ıstification

The primary authority for FMI work is the Magnuson Fishery Conservation and Management Act of 1976 (MFCMA). Our work also supports the Marine Mammal Protection Act and the Endangered Species Act through reporting of fishery interaction with monk seals, dolphins, and sea turtles.

FMI fisheries-dependent data and economic analyses support NMFS strategic plan elements concerning maintaining fish populations and recovering endangered and threatened species.

nkages

This CYOP is coordinated with the other fisheries research programs (with an emphasis on the Stock Assessment Investigation). Computer programming work is also coordinated with ITS. Economic research is coordinated with the SWFSC - La Jolla and SWR (Long Beach and Pacific Area Office) economists when joint research funds are available.

ontracts

Contracts are a small and infrequent percentage of the FMI budget.

NC701

Products/Services

Annual status reports on US domestic fisheries in the western Pacific.

High quality, detailed fishery information data bases for research purposes.

Reports and published papers on research results.

Clients

Inputs: FMI depends on developing good working relationships with the Hawaii fishing community, particularly the commercial fishing industry and the seafood market sectors.

FMI also collaborates with each of its primary clients in the provision of its services.

Clients:

Western Pacific Regional Fishery Management Council (Council)
Honolulu Laboratory research programs
Other NMFS offices (e.g., SWFSC - La Jolla, SWR & PAO)
University of Hawaii researchers
Private industry, environmental and conservation organizations, and the general public
State, territorial, and commonwealth fisheries agencies.

Fishery Monitoring MILESTONES, EVENTS AND ACTIVITIES SECTION: HL701.97

Task #	MEA	Seq #	Major Milestone, Event, or Activity -- Description	Start Date	Finish Date
8L1C2A76	A	1	Perform coding, editing, entering, and verifying activities for Laboratory's fisheries dependent and research data.	10/96	9/97
	A	2	Perform data retrieval, reformatting, and archiving functions for Laboratory data.	10/96	9/97
8L1C1A75	A	3	Coordinate activities of the WPacFIN Fisheries Data Coordinating Committee.	10/96	9/97
	A	4	Collect, centralize, and maintain fisheries data from Guam, American Samoa, Northern Mariana Islands, and Hawaii.	10/96	9/97
	M	5	Produce current year volume of *Fishery Statistics of the Western Pacific* from WPacFIN data.	----	6/97
	M	6	Produce initial FMPI/WPacFIN web page of summary fisheries statistics	----	9/97
8L1C2A74	A	7	Collect and compile biological, operational, and economic data from commercial and recreational fisheries, and issue quarterly reports from Federal logbooks.	10/96	9/97
	M	8	Prepare annual reports on Federally monitored fisheries (bottomfish, lobster, pelagics).	----	7/97

701 Cont'd	A	9	Compile and report quarterly on protected species fisheries interactions from Federally managed fisheries.	10/96	9/97
	A	10	Participate in Council plan team activities and provide Laboratory liaison with Council.	10/96	9/97
	A	11	Coordinate and conduct economic and other social science research with the JIMAR pelagics program.	10/96	9/97
	A	12	Continue conversion of fishery monitoring databases into Oracle.	10/96	9/97

(For each Task # indicate M = Milestone, E = Event, A = Activity, Sequence #, Description of the Activity, Event or Milestone and the approximate dates of starting and finishing an Activity. Milestone and event dates should be indicated in the date finish column. Use additional pages if required.)

NOAA Marine Fisheries Service
Management Information System
Activity Summary report

tivity:	Name:	Org Code:	Activity Type:
VC702	Fisheries Management Science	FR2200	BLANK

CILITY / LOCATION

FACILITY	NAME
SWC2	Honolulu Lab

DGETED AMOUNTS

LINE ITEM	PHASE	OBJECT CLASS		AMOUNT
8L1A4B74	74	11 - Personnel compensation (labor)		$80,400
8L1A4B74	74	12 - Personnel benefits		$35,800
8L1A4B74	74	21 - Travel, transportation of persons		$4,000
8L1A4B74	74	24 - Printing, reproduction		$1,000
8L1A4B74	74	25 - Contracts, contractual services		$1,000
8L1A4B74	74	26 - Supplies and materials		$2,000
			Sub total for Phase Class:	**$124,200**
			Total for Task:	**$124,200**
8L1A6A71	71	11 - Personnel compensation (labor)		$275,700
8L1A6A71	71	12 - Personnel benefits		$122,600
8L1A6A71	71	21 - Travel, transportation of persons		$4,200
8L1A6A71	71	25 - Contracts, contractual services		$3,000
8L1A6A71	71	26 - Supplies and materials		$4,000
			Sub total for Phase Class:	**$409,500**
			Total for Task:	**$409,500**
8L1A6A73	73	11 - Personnel compensation (labor)		$213,500
8L1A6A73	73	12 - Personnel benefits		$95,000
8L1A6A73	73	21 - Travel, transportation of persons		$4,000
8L1A6A73	73	26 - Supplies and materials		$2,000
			Sub total for Phase Class:	**$314,500**
			Total for Task:	**$314,500**
8L1A7A70	70	11 - Personnel compensation (labor)		$238,900
8L1A7A70	70	12 - Personnel benefits		$106,200
8L1A7A70	70	21 - Travel, transportation of persons		$8,700
8L1A7A70	70	26 - Supplies and materials		$14,000
8L1A7A70	70	41 - Grants, subsidies		$12,000
			Sub total for Phase Class:	**$379,800**
			Total for Task:	**$379,800**
8L1C5A73	73	11 - Personnel compensation (labor)		$112,300
8L1C5A73	73	12 - Personnel benefits		$50,000
8L1C5A73	73	21 - Travel, transportation of persons		$6,500

8L1C5A73	73	24 - Printing, reproduction	$2,000
8L1C5A73	73	26 - Supplies and materials	$2,000
		Sub total for Phase Class:	**$172,800**
		Total for Task:	**$172,800**
		Total for Activity:	**$1,400,800**

(O

	PERCENT
Western Pacific invertebrate fisheries	12.00%
Western Pacific bottomfish and armorhead fisheries	13.00%
Pacific highly migratory pelagic fisheries	62.00%
Nearshore fisheries	2.00%
Pacific marine mammals	3.00%
Sea turtles	5.00%

FIP

	PERCENT
Western Pacific Bottomfish and Seamount Groundfish	13.00%
Western Pacific Crustaceans	13.00%
Western Pacific Pelagics	62.00%
Western Pacific Precious Corals	0.00%

ASSOCIATED LEGISLATION

	PERCENT
Endangered Species act	
Magnuson act	
Marine Mammal Protection act	

ASSOCIATED AGENCIES

FAO	UN FAO
HI_DLNR	Hawaii Department of Land and Natural Resources
NRI	JAPAN NATIONAL RESEARCH INSTITUTE OF JFSRA
SPC	South Pacific Commission
USFWS	US Fish and Wildlife Service
WPFMC	Western Pacific Fishery Management Council

ASSIGNED STAFFING

NMFS POS_ID	NMFS EMPLOYEE OR VACANT POSITION	PERCENT
0516	BOGGS, CHRISTOFER	100.00%
0214	CHANG, RANDOLPH	100.00%
1931	DE MARTINI, EDWARD	100.00%
1559	DINARDO, GERARD	100.00%

1188	HUMPHREYS, ROBERT	100.00%
1900	KAZAMA, THOMAS	100.00%
0748	KLEIBER, PIERRE	100.00%
0061	KOBAYASHI, DONALD	100.00%
2399	MOFFITT, ROBERT	100.00%
0930	MUNDY, BRUCE	100.00%
2139	PARRISH, FRANK	100.00%
0977	POLOVINA, JEFFREY	100.00%
2560	SAMPAGA, JEFFREY	100.00%
1855	SEKI, MICHAEL	100.00%
2531	SHIOTA, PAUL	100.00%
1084	SKILLMAN, ROBERT	100.00%
1885	UCHIYAMA, JAMES	100.00%
2522	WETHERALL, JERRY	75.00%

Williams, H
Nishimoto, R

Total for Activity: = 20 FTE

NC702

Problem Statement

Management of central and western Pacific marine fisheries and recovery of protected species by NMFS, the WPRFMC, and multinational bodies requires reliable and timely scientific advice based on comprehensive fishery monitoring, stock assessment, and biological and oceanographic research.

1B. Objectives (What are the major objectives being pursued by this CYOP?)

a) To provide timely and accurate assessments of the status of fish stocks.

b) To develop understanding of relationships and linkages between physical ocean processes (circulation, frontal structure, etc.) and biological and ecological processes (resource distribution and availability, population dynamics, productivity, predation, etc.) and the relationships of both to fisheries.

c) To provide fundamental biological and ecological research on managed species for improved understanding of the mechanisms that control resource distribution and abundance.

Methodology

1) Stock assessment and management analyses are conducted with mathematical and statistical models and computer simulations, using data from field surveys and laboratory studies;

2) A variety of statistical and modeling techniques are used in studies of ocean processes and ecosystem dynamics to analyze and integrate in situ data from oceanographic and biological surveys, fisheries data, outputs from numerical ocean circulation models, and data on sea surface temperature, wave height, and other variables from satellite-borne remote sensors;

3) Fish biology and ecology studies are based on biological observations collected in field surveys with a variety of sampling gears, laboratory studies of biological specimens, and data from tag and recapture experiments (standard tags, with pop-up archival tags soon to be deployed). A variety of statistical and analytical methods are applied.

Justification

NOAA strategic plan; build sustainable fisheries support for implementation of fishery management plans under Magnuson Act, including Pacific pelagics, NWHI bottomfish and seamount ground fishes, and NWHI crustaceans; support for U.S. participation in Interim Scientific Committee for Tuna and Tuna-like Species in the North Pacific (ISC).

Linkages

Coordination with Honolulu Laboratory's Protected Species Investigation and Fishery Information and Performance Investigation; collaboration with SWFSC La Jolla Laboratory; collaboration with SWR and other NMFS officers; coordination and collaboration with foreign fisheries laboratories and universities.

Contracts

None.

Products/Services

Reports, advisories, and presentations to NMFS and the Western Pacific Regional Fishery Management Council (WPFMC); publication in peer-reviewed scientific journals.

SWC702

Clients

Clients include NMFS/HQ, NMFS/SWR, WPFMC, FAO, cooperating agencies (e.g., HI DLNR, USFWS); scientific peers and collaborators at SPC, NRIFSF and other national or regional research laboratories; JIMAR PFRP; fishing industry; the public.

Suppliers include JIMAR, SWR, voluntary support and cooperation of commercial and recreational fishermen, fish dealers, HI DLNR and USFWS, JIMAR PFRP.

Fisheries MILESTONES, EVENTS AND ACTIVITIES SECTION: HL702.97

CYOP	Task #	MEA	Seq #	Major Milestone, Event or Activity Description	Date Start	Date Finish
702	8L1A7A70	A	1	Provide scientific support for implementation of Crustaceans FMP.	10/96	9/97
		M	2	Issue NWHI lobster status of stocks report.	---	6/97
		A	3	Conduct NWHI lobster assessment survey and biological studies (with Task 8L1A6A71 & 8L1A6A73)	6/97	7/97
		A	4	Provide pelagic stock assessment information to WPRFMC plan team.	4/97	6/97
		A	5	Develop plans and proposals for international cooperative swordfish stock assessment under ISC Swordfish Working Group.	1/97	9/97
		M	6	Organize and host Second International Swordfish Symposium (March 1997).	10/96	3/97
		A	7	Develop, document and implement procedures to estimate longline fishery bycatch of turtles, sharks, seabirds and other species.	10/96	9/97
		A	8	Develop simulation models for stock assessment and studies of population dynamics, fishery impacts and management policy analysis.	10/96	9/97
		A	9	Coordinate development of Oracle data base system for Honolulu Laboratory.	10/96	9/97
		A	10	Direct JIMAR project to develop capability for easy user access to Oracle pelagic fishery database.	10/96	9/97

CYOP	Task #	MEA	Seq #	Major Milestone, Event or Activity Description	Date Start	Date Finish
	8L1A4B74	A	1	Conduct oceanographic cruise aboard the Townsend Cromwell to study the physical and biological properties associated with the Subtropical Front	1/97	5/97
702 Cont'd		E	2	Complete manuscript of study describing species assemblages of epi- and meso-pelagic cephalopods at NPTZ frontal regions	1/97	8/97
		A	3	Analyze data collected from first two deployments of seal mounted cameras; conduct another deployment on Townsend Cromwell cruise	10/96	8/97
		M	4	Complete manuscript on the use of video technology ("crittercam") for identification and assessment of monk seal foraging habitat.	---	9/97
	8L1C5A73	E	1	Use ocean circulation model output to describe change in basin circulation during 1987-1995; present results at PISCES meeting.	---	10/96
		A	2	Use TOPEX satellite altimetry to describe ocean circulation in swordfish fishery grounds north of Hawaii	10/96	9/97
		E	3	Conduct 2-week course on climate and fisheries in La Paz, B.C., Mexico, 11-22 November 1996 (Centro de Investigationes Biologicas del Noroeste)	11/96	11/96
	8L1A6A71	A	1	Lead JIMAR projects analyzing Hawaii pelagic fishery data	10/96	9/97
		M	2	Publish papers on trends in Hawaii pelagic fishery catch and CPUE	---	9/97

CYOP	Task #	MEA	Seq #	Major Milestone, Event or Activity Description	Date Start	Date Finish
		A	3	Lead JIMAR projects on environmental effects on swordfish fishing success and for archival tagging of swordfish	10/96	9/98
		A	4	Conduct conventional tag & release program on swordfish	10/96	9/97
702 Cont'd		A	5	Conduct research cruises to study swordfish and bigeye tuna ecology, life history and gear vulnerability	10/96	9/97
		M	6	Complete Hawaii bottomfish section for annual WPRFMC status of stocks report (with 8L1C5A73)	---	7/97
	8L1A6A73	A	1	Conduct swordfish life history research	10/96	9/97
		A	2	Evaluate swordfish hard parts as ageing structures	10/96	9/97
		M	3	Complete manuscript on size-at-sexual maturity in swordfish	---	9/97
		M	4	Complete manuscript on August (FFS) and September (Midway) Northwestern Hawaiian Island reef fish surveys	---	6/97
	All tasks	A	1	Provide scientific support to WPRFMC via Plan Teams, SSC and Council Meetings	10/96	9/97

(For each Task # indicate M = Milestone, E = Event, A = Activity, Sequence #, Description of the Activity, Event or Milestone and the approximate dates of starting and finishing an Activity. Milestone and event dates should be indicated in the date finish column. Use additional pages if required.)

NOAA Marine Fisheries Service
Management Information System
Activity Summary report

Activity:	Name:	Org Code:	Activity Type:
SWC703	Protected Species - Monk Seals	FR2200	BLANK

ACILITY / LOCATION

FACILITY	NAME
SWC2	Honolulu Lab

UDGETED AMOUNTS

LINE ITEM	PHASE	OBJECT CLASS	AMOUNT
8L1AMS77	77	11 - Personnel compensation (labor)	$238,600
8L1AMS77	77	12 - Personnel benefits	$106,100
8L1AMS77	77	21 - Travel, transportation of persons	$24,000
8L1AMS77	77	22 - Transportation of things	$3,000
8L1AMS77	77	23 - Rent, utilities, telecommunications	$15,900
8L1AMS77	77	24 - Printing, reproduction	$2,000
8L1AMS77	77	25 - Contracts, contractual services	$49,300
8L1AMS77	77	26 - Supplies and materials	$35,100
		Sub total for Phase Class:	**$474,000**
		Total for Task:	**$474,000**
		Total for Activity:	**$474,000**

-O

	PERCENT
Western Pacific invertebrate fisheries	5.00%
Western Pacific bottomfish and armorhead fisheries	5.00%
Pacific marine mammals	90.00%

IP

	PERCENT
Western Pacific Bottomfish and Seamount Groundfish	10.00%
Western Pacific Crustaceans	10.00%
Western Pacific Pelagics	10.00%

SOCIATED LEGISLATION

	PERCENT
Endangered Species act	
Marine Mammal Protection act	

SOCIATED AGENCIES

MMC	MARINE MAMMAL COMMISSION

NBS	National Biological Survey
USFWS	US Fish and Wildlife Service
WPFMC	Western Pacific Fishery Management Council

SSIGNED STAFFING

ANTONELIS GEORGE
BECKER BRENDA
DOLLAR ROBERT
HENDERSON JOHN
JOHANOS KAM THEA
RAGEN TIMOTHY
SISSON JOYCE

7 FTE

SWC703

Problem Statement

The Hawaiian monk seal is the only endangered pinniped found entirely in U.S. waters and, with its two congeners, has declined severely due to human activities. The Caribbean species is thought to be extinct, the Mediterranean species is on the verge of extinction, and the Hawaiian monk seal numbers ca. 1300 to 1400 and has been declining at 5% per year for the last decade. The problem, therefore, is the rapid and unnatural decline of this protected marine mammal.

1B. Objectives (What are the major objectives being pursued by this CYOP?)

a) To mitigate the decline at French Frigate Shoals through assessment of health and disease, causes of mortality, foraging patterns, and reef fish productivity

b) To rehabilitate/translocate seals from French Frigate Shoals as indicated and possible.

c) To investigate the etiology of the eye ailment currently affecting captive yearlings in the rehabilitation program.

d) To bolster the Midway Atoll population by introducing rehabilitated seals.

Methodology

a) A field camp will be established at French Frigate Shoals to study, among other things, survival rates and sources of mortality; food habits; and animal condition, growth and behavior. The studies will determine if the decline at French Frigate Shoals continues or has begun to abate.

b) Kewalo Research Facility will be enhanced to increase our ability and capacity to rehabilitate seals from French Frigate Shoals.

c) Diagnostic evaluation of the eye ailment will continue under the direction of a contract veterinarian. The resulting information will be used to determine if, when, and where the yearlings in captivity can be released.

d) The Midway recovery plan will be completed to guide recovery actions at that site.

Justification

The activities under this CYOP are clearly justified by Goal 4 of the Strategic Plan of the National Marine Fisheries, and by the Endangered Species Act and the Marine Mammal Protection Act. The Hawaiian monk seal is the most endangered pinniped in U.S. waters; it numbers ca. 1300 to 1400 and is declining rapidly. Furthermore, much of its recent decline can be attributed to human activities. Therefore, its recovery is of highest priority.

SWC703

Linkages

a) Southwest Region, NMFS: collaborates on management activities, particularly those related to management of human activities that affect monk seals.

b) Fish and Wildlife Service, Hawaiian Islands National Wildlife Refuge: assumes primary responsibility for protection of land habitat; also collaborates on logistics and support activities for field studies.

c) National Biological Survey, National Wildlife Health Center, Honolulu Field Station: collaborates on issues related to health and disease of monk seals, and on captive care of seals undergoing rehabilitation and relocation. Agency provides a veterinary pathologist who performs necropsies, consults on captive care, review protocols, and analyzes data.

d) NOAA ship Townsend Cromwell: provides logistical support for field research.

e) U. S. Coast Guard: collaborates with logistics (transport of seals and biologists), and protection of habitat (enforcement of fishery regulations to minimize monk seal/fishery interactions).

Contracts

Kewalo construction ($150K, 34%)
Contract veterinarian ($45K, 10%)
Diagnostic laboratory analyses ($40K, 9.3%)

Products/Services

a) A technical memorandum summarizing the status the French Frigate Shoals and Midway Atoll populations.

b) Data analyses the catastrophic decline at French Frigate Shoals.

c) Background information for the December 1996 and 1997 meetings of the Hawaiian Monk Seal Recovery Team.

d) Background information necessary for planning recovery actions at French Frigate Shoals (e.g., three-year recovery plans).

e) Journal publication reviewing past rehabilitation efforts and success.

f) Evaluate introduction of seals under rehabilitation.

Clients

a) National Marine Fisheries Service (Honolulu Laboratory, Southwest Fisheries Science Center, Southwest Region, Headquarters)

b) Marine Mammal Commission

c) Hawaiian Monk Seal Recovery Team

d) Fish and Wildlife Service (Hawaiian Islands National Wildlife Refuge)

Monk Seal MILESTONES, EVENTS AND ACTIVITIES SECTION: HL703.97

CYOP	Task #	MEA	Seq #	Major Milestone, Event, or Activity -- Description	Start Date	Finish Date
703		E	1	Provide background information and participate in Hawaiian monk seal recovery team meeting.	---	1/97
		A	2	Assess population status at 6 major breeding locations.	1/97	9/97
		M	3	Complete annual Technical Memorandum on field studies of Hawaiian monk seal.	---	9/97
		M	4	Complete recovery plan for Midway Atoll monk seal population	---	9/97
		M	5	Complete review of monk seal rehabilitation and prepare manuscript for publication in scientific journal.	---	9/97
		M	6	Summarize diagnostic findings of monk seal pups affected by eye disease and submit for external review of specialists.	---	4/97

		M	7	Report of Hawaiian monk seal entanglements in marine debris and summary of debris destroyed.	---	9/97

(for each Task # indicate M = Milestone, E = Event, A = Activity, Sequence #, Description of the Activity, Event or Milestone and the approximate dates of starting and finishing an Activity. Milestone and event dates should be indicated in the date finish column. Use additional pages if required.)

NOAA Marine Fisheries Service
Management Information System
Activity Summary report

tivity:	Name:	Org Code:	Activity Type:
WC704	Marine Turtle Research	FR2200	BLANK

CILITY / LOCATION

FACILITY	NAME
SWC2	Honolulu Lab

JDGETED AMOUNTS

LINE ITEM	PHASE	OBJECT CLASS	AMOUNT
8L1AHT79	79	11 - Personnel compensation (labor)	$73,300
8L1AHT79	79	12 - Personnel benefits	$32,600
8L1AHT79	79	21 - Travel, transportation of persons	$12,000
8L1AHT79	79	22 - Transportation of things	$2,000
8L1AHT79	79	23 - Rent, utilities, telecommunications	$8,000
8L1AHT79	79	25 - Contracts, contractual services	$35,500
8L1AHT79	79	26 - Supplies and materials	$6,500
8L1AHT79	79	41 - Grants, subsidies	$58,100
		Sub total for Phase Class:	**$228,000**
		Total for Task:	**$228,000**
		Total for Activity:	**$228,000**

LO

	PERCENT
Sea turtles	0.95
All OLO units combined	0.05

MP

	PERCENT
All FMPs combined	0.05
Western Pacific Pelagics	0.95

SSOCIATED LEGISLATION

	PERCENT
Endangered Species act	

SSOCIATED AGENCIES

PERSONNEL

BALAZS, GEO. 100%

HQ	NMFS Headquarters	
SWR	Southwest Regional Office	
USFWS	US Fish and Wildlife Service	1FTE.
WPFMC	Western Pacific Fishery Management Council	

Turtle MILESTONES, EVENTS AND ACTIVITIES SECTION: HL704.97

CYOP	Task #	MEA	Seq #	Major Milestone, Event, or Activity -- Description	Start Date	Finish Date
704	8L1AHT79	A	1	Conduct investigations of biology and ecology of marine turtles, including growth rates, food sources, habitat use, and distribution.	10/96	9/97
		E	2	Conduct monitoring of 1997 nesting population at French Frigate Shoals of tumored and non-tumored turtles at inshore foraging habitats.	4/97	8/97
		A	3	Conduct turtle stranding, salvage, and necropsy program.	10/96	9/97
		A	4	Provide scientific and technical support to SWR and F/PR in Section 7 Consultation regarding turtle takes in Hawaii longline fishery.	10/96	9/97
		A	5	Continue interagency cooperative turtle research with U.S. Fish and Wildlife Service and State of Hawaii Department of Land and Natural Resources.	10/96	9/97
		A	6	Provide technical assistance to turtle researchers in other Pacific Island areas, to NMFS National Sea Turtle Coordinator, and to U.S. Pacific Sea Turtle Recovery Team	10/96	9/97

NOAA Marine Fisheries Service
Management Information System
Activity Summary report

ctivity:	Name:	Org Code:	Activity Type:
WC700	Honolulu Lab Director's Office & Administration	FR2200	Programmatic Activity

ACILITY / LOCATION

FACILITY	NAME
SWC2	Honolulu Lab

UDGETED AMOUNTS

LINE ITEM	PHASE	OBJECT CLASS		AMOUNT
8L1A7A71	71	41 - Grants, subsidies		$115,900
			Sub total for Phase Class:	**$115,900**
			Total for Task:	**$115,900**
8L1C1A71	71	11 - Personnel compensation (labor)		$202,300
8L1C1A71	71	12 - Personnel benefits		$90,000
8L1C1A71	71	21 - Travel, transportation of persons		$2,500
8L1C1A71	71	26 - Supplies and materials		$5,000
8L1C1A71	71	31 - Equipment, capitalized & noncap.		$26,400
			Sub total for Phase Class:	**$326,200**
			Total for Task:	**$326,200**
8L1C1C72	72	11 - Personnel compensation (labor)		$41,900
8L1C1C72	72	12 - Personnel benefits		$17,800
8L1C1C72	72	26 - Supplies and materials		$3,100
			Sub total for Phase Class:	**$62,800**
			Total for Task:	**$62,800**
8L2ASM70	70	21 - Travel, transportation of persons		$65,000
8L2ASM70	70	23 - Rent, utilities, telecommunications		$15,000
8L2ASM70	70	25 - Contracts, contractual services		$138,500
8L2ASM70	70	26 - Supplies and materials		$87,200
8L2ASM70	70	31 - Equipment, capitalized & noncap.		$18,000
8L2ASM70	70	41 - Grants, subsidies		$45,100
			Sub total for Phase Class:	**$368,800**
			Total for Task:	**$368,800**
9WGN4070	70	11 - Personnel compensation (labor)		$111,000
9WGN4070	70	12 - Personnel benefits		$49,400
9WGN4070	70	21 - Travel, transportation of persons		$20,000
			Sub total for Phase Class:	**$180,400**
			Total for Task:	**$180,400**
9WGN4071	71	11 - Personnel compensation (labor)		$180,900

9WGN4071	71	12 - Personnel benefits	$80,500
9WGN4071	71	21 - Travel, transportation of persons	$5,000
9WGN4071	71	23 - Rent, utilities, telecommunications	$127,600
9WGN4071	71	24 - Printing, reproduction	$8,000
9WGN4071	71	25 - Contracts, contractual services	$113,900
9WGN4071	71	26 - Supplies and materials	$46,700
		Sub total for Phase Class:	**$562,600**
		Total for Task:	**$562,600**

Total for Activity: **$1,616,700**

LO

	PERCENT
Western Pacific bottomfish and armorhead fisheries	10.00%
Pacific highly migratory pelagic fisheries	35.00%
Pacific marine mammals	35.00%
Sea turtles	20.00%

MP

	PERCENT
Swordfish	30.00%
Western Pacific Bottomfish and Seamount Groundfish	15.00%
Western Pacific Crustaceans	15.00%
Western Pacific Pelagics	30.00%

SSOCIATED LEGISLATION

	PERCENT
Endangered Species act	
Magnuson act	
Marine Fisheries act	
Marine Mammal Protection act	

SSOCIATED AGENCIES

HQ	NMFS Headquarters
SWC1	Southwest Fisheries Science Center
SWR	Southwest Regional Office
WPFMC	Western Pacific Fishery Management Council

SSIGNED STAFFING

ABBOTT STOUT SANDRA
BECKER BRENDA
DINARDO GERARD

FIUST FRANCINE
HIGUCHI WAYDE
KAMEI SUSAN
KENDIG JUDITH
KUROMOTO JANINE
LAURS R
MOFFITT ROBERT
ONOSAKI LINDA
PAPPAS JANET
POOLEY SAMUEL
PRICE RUSSELL
TIEMAN DONALD
UYEDA RICHARD
WONG GLORIA
WONG SUSAN
YAMAGUCHI DEBORAH
YOSHIMOTO RONALD

20 FTE

WC700

Problem Statement

The Director's office, Administration, and Scientific Support Services provide overall management guidance/leadership and all administrative support for the Honolulu Laboratory scientific and technical support programs. Ensure efficient and effective use of human, facility, computer resources, and fiscal resources. Serve as focus for communication of scientific programs with outside agencies and public. Interact with WPRFMC to provide scientific advice for fishery management.

This CYOP addresses all the scientific programs underway at the Honolulu Laboratory.

1B. Objectives (What are the major objectives being pursued by this CYOP?)

a) To provide scientific guidance and overall management and Administration of both human and fiscal resources for the Honolulu Laboratory;

b) To improve accountability of human and fiscal resources for all laboratory functions;

c) To improve productivity and efficiency for scientific programs, technical support programs, and Administration.

d) To ensure that all published materials are in compliance with established formats (both internally and externally) and that they are written clearly and of high quality.

e) To provide computer and library resources to the scientific, technical, and management staff of the Honolulu Laboratory, Regional Office, and JIMAR.

f) To provide electronic communication services to permit sharing of information locally, nationally, and internationally.

g) To provide consultation and assistance on computer and library related questions.

Methodology

1) Provide scientific leadership to staff on research directions and seek adequate funding for research;

2) Improve facilities provide conducive environment for work and to provide state-of-the art equipment and support to staff to increase efficiency;

3) Seek training opportunities in all areas to improve staff skills and to develop teamwork among all disciplines of research to maximize sharing of resources and to provide cooperation.

4) Provide editing, typing, filing, proofreading, and development of graphics for scientific publications.

(5) Provide community outreach to constituent and general public.

SWC700

Justification

The Honolulu Laboratory conducts fisheries and protected species research and related activities and operations that support NMFS goals to BUILD SUSTAINABLE FISHERIES, including assessing the status of Hawaii and western Pacific pelagic and Northwestern Hawaiian Island insular fishery resources, advancing fishery predictions through fishery oceanography, managing for economic growth and promoting a healthy fishing industry and reducing bycatch of the Hawaii longline fishery; and to RECOVER PROTECTED SPECIES, including reducing impact of human activity on endangered Hawaiian monk seals and endangered and threatened sea turtles, assessing status of Hawaii monk seal and sea turtles, and implementing conversation and recovery plans for Hawaiian monk seals and sea turtles.

Specific objectives of the Laboratory are to provide scientific information to WPRFMC, NMFS, and others for five FMPs, including Western Pacific pelagic fishery resources, NWHI lobster, NWHI bottomfish, seamount groundfish, and precious corals; provide scientific information in support of NMFS Biological Opinion on the Hawaii-based longline fishery's interactions with sea turtles and conduct related fisheries research.

Linkages

This CYOP directly links with all other CYOPs for the Honolulu Laboratory.

Contracts

1) University of Hawaii for cooperative research.

2) Facility maintenance

3) Repair and maintenance of various items (a/c; equipment, computer, etc.)

4) Physical examinations for seagoing employee

5) Janitorial contract

6) Translation

Products/Services

Efficient and effective day-to-day administration of the Honolulu Laboratory in areas of procurement, personnel, and facility maintenance; flow of information/products to outside agencies and the public.

Clients

NMFS/SWC, NMFS/SWR, and other offerin NMFS, WPRFMC, and other personnel at the Honolulu laboratory, and the general public.

Director's Office, Administration, Editorial, and Information Technology
MILESTONES, EVENTS AND ACTIVITIES SECTION: HL700.97

CYOP	Task #	MEA	Seq #	Major Milestone, Event, or Activity -- Description	Start Date	Finish Date
700	9WGN4070	A	1	Direct and oversee Honolulu Laboratory's operation, including facilities.	10/96	9/97
		A	2	Provide guidance for overall scientific program of Honolulu Laboratory.	10/96	9/97
		A	3	Serve as focus for communication of Honolulu Laboratory scientific programs with outside agencies and the public.	10/96	9/97
		A	4	Allocate funding and personnel to achieve goals of NMFS and the Honolulu Laboratory.	10/96	9/97
		A	5	Serve as the chief scientist for the Ocean Color Program and the NOAA CoastWatch.	10/96	9/97

		A	6	Interact with WPRFMC and Joint Institute For Marine and Atmospheric Research to ensure continuity and development of programs.	10/96	9/97
		A	7	Complete actions as needed for new building construction.	10/96	9/97
700 Cont' d		A	8	Expand team-building training.	10/96	9/97
	9WGN4071	A	9	Provide overall management and administrative support in the areas of budget, contracting, and procurement for the Honolulu Laboratory.	10/96	9/97
		A	10	Provide overall facility management and administrative support for our mission.	10/96	9/97
	8L1C1A70	A	11	Perform scientific publication functions.	10/96	9/97
	8L1C1A71 8L1C1A72	A	1	Operate, monitor, and maintain local area network equipment, software, and communications links	10/96	9/97

		A	2	Design, program, test, install, maintain, and operate ITS systems.	10/96	9/97
		A	3	Provide computer and information systems training for users.	10/96	9/97
		A	4	Overall coordination and conversion of databases and development of information systems including Oracle.	10/96	9/97
700 Cont'd		A	5	Provide library and scientific reference service to research programs.	10/96	9/97
		A	6	Overall administration of library resources and day-to-day operations.	10/96	9/97
		A	7	Develop operational WWW website for Laboratory	10/96	9/97

(For each Task # indicate M = Milestone, E = Event, A = Activity, Sequence #, Description of the Activity, Event or Milestone and the approximate dates of starting and finishing an Activity.

Tiburon Laboratory

NOAA Marine Fisheries Service
Management Information System
Activity Summary report

Activity:	Name:	Org Code:	Activity Type:
SWC800	Tiburon Laboratory Administration	FR2300	Programmatic Activity

FACILITY / LOCATION

FACILITY	NAME
SWC3	Tiburon Lab

BUDGETED AMOUNTS

LINE ITEM	PHASE	OBJECT CLASS	AMOUNT
9WGN4080	80	11 - Personnel compensation (labor)	$169,100
9WGN4080	80	12 - Personnel benefits	$37,200
9WGN4080	80	21 - Travel, transportation of persons	$7,500
9WGN4080	80	22 - Transportation of things	$1,500
9WGN4080	80	23 - Rent, utilities, telecommunications	$12,000
9WGN4080	80	24 - Printing, reproduction	$1,500
9WGN4080	80	25 - Contracts, contractual services	$10,200
9WGN4080	80	26 - Supplies and materials	$3,000
		Sub total for Phase Class:	$242,000
		Total for Task:	$242,000
9WGN4082	82	23 - Rent, utilities, telecommunications	$12,600
9WGN4082	82	25 - Contracts, contractual services	$47,500
9WGN4082	82	26 - Supplies and materials	$4,200
		Sub total for Phase Class:	$64,300
		Total for Task:	$64,300
		Total for Activity:	$306,300

ASSIGNED STAFFING

NMFS POS_ID	NMFS EMPLOYEE OR VACANT POSITION	PERCENT
1000	MAC CALL, ALEC	50.00%
1690	MAVRANTONIS, ELAINE	100.00%
2398	PETRAITIS, ADRIENNE	100.00%
2541	SPURGEON, MARIE	100.00%
1189	YOKOTA, ISSEI	100.00%
	Total for Activity:	4.5 FTE's

SWC800

Problem Statement

Providing overall management and administration of both human and fiscal resources for the Tiburon Laboratory.

1B. Objectives (What are the major objectives being pursued by this CYOP?)

a) To adequately and efficiently support the research efforts.

b) To respond to requests from management in Tiburon and La Jolla.

Methodology

Regular monitoring of operations and interviewing service customers.

Contracts

Janitorial service and grounds maintenance.

Clients

Scientists at our laboratory and Administration at Tiburon and La Jolla.

NOAA Marine Fisheries Service
Management Information System
Activity Summary report

Activity:	Name:	Org Code:	Activity Type:
SWC811	Groundfish Analysis	FR2300	Programmatic Activity

FACILITY / LOCATION

FACILITY	NAME
SWC3	Tiburon Lab

BUDGETED AMOUNTS

LINE ITEM	PHASE	OBJECT CLASS	AMOUNT
8L1AGF81	81	11 - Personnel compensation (labor)	$424,400
8L1AGF81	81	12 - Personnel benefits	$89,200
8L1AGF81	81	21 - Travel, transportation of persons	$10,000
8L1AGF81	81	24 - Printing, reproduction	$3,000
8L1AGF81	81	26 - Supplies and materials	$6,500
8L1AGF81	81	31 - Equipment, capitalized & noncap.	$15,000
		Sub total for Phase Class:	$548,100
		Total for Task:	$548,100
8L1C2A80	80	22 - Transportation of things	$5,000
8L1C2A80	80	25 - Contracts, contractual services	$85,000
8L1C2A80	80	31 - Equipment, capitalized & noncap.	$10,000
		Sub total for Phase Class:	$100,000
		Total for Task:	$100,000
		Total for Activity:	$648,100

OLO

	PERCENT
Pacific coast groundfish fisheries	100.00%

FMP

	PERCENT
Pacific Coast Groundfish	100.00%

ASSOCIATED LEGISLATION

	PERCENT
Magnuson act	

ASSOCIATED AGENCIES

AKC	Alaska Fisheries Science Center
CADFG	CALIFORNIA DEPARTMENT OF FISH AND GAME

NWC	Northwest Fisheries Science Center
PFMC	Pacific Fishery Management Council

ASSIGNED STAFFING

NMFS POS_ID	NMFS EMPLOYEE OR VACANT POSITION	PERCENT
1994	PEARSON, DONALD	100.00%
0482	RALSTON, STEPHEN	100.00%
0196	ROBERTS, DALE	100.00%
1139	SAKUMA, KEITH	100.00%
1043	WOODBURY, DAVID	100.00%

Total for Activity: 5 FTE's

3 VACANCIES:

VICE-LENARZ
RES FISH. BIO
COMP. PROG. ANALYST

8 FTEs

NOAA Marine Fisheries Service
Management Information System
Activity Narratives Report

SWC811

Problem Statement

This Investigation provides information needed to implement the groundfish management plan of the Pacific Fishery Management Council.

1B. Objectives (What are the major objectives being pursued by this CYOP?)

a) To obtain fishery dependent and independent data needed to assess and manage groundfish.

b) To improve assessment and management of groundfish.

c) To improve knowledge of recruitment process of groundfish.

Methodology

Collaborate with other agencies in collection and processing of fishery dependent and independent data. Use state-of-the-art assessment techniques and evaluate assessment and management with simulation models. Develop fishery independent biomass estimates such as YOY survey and larval production method. Collect oceanographic data in conjunction with surveys and develop models relating to abundance, survival and distribution of YOY with environmental factors.

Justification

Work plans are based on stated general needs of the PFMC, specific needs of the Groundfish Management Team, consultation with members of the scientific and fishing industry communities and direction by the SWC. The problem was chosen by the SWC.

Linkages

AKC Sandpoint Lab, NWC Newport Lab, PFEG, CDF&G, ODF&W, WDF&W, U.C. Davis, San Francisco State University, Moss Landing Laboratory and SWC La Jolla Lab.

Contracts

a) NRC postdoctoral fellowship 8%
b) Chilipepper assessment 2%
c) Plankton sorting 1%
d) Sample processing 2%

Products/Services

Stock assessments are incorporated in the Counil's annual stock status document. Staff regularly publishes in peer-reviewed journals and administrative reports and presents talks at scientific meetings.

Clients

The main clients are the PFMC and its entities. Staff responds to request for information by the fishing industry and other scientists. We are dependent of west coast states, PacFIN, AKC, PFEG and various internet sources for data.

SOUTHWEST FISHERIES SCIENCE CENTER
CURRENT YEAR OPERATING PLAN - FORM 5
FY 1997

CYOP Number: SWC - 811 **Lab/Div:** Tiburon Laboratory

Title: Groundfish Analysis Investigation

Leader: Stephen V. Ralston

MILESTONES, EVENTS AND ACTIVITIES SECTION

(For each Task # indicate M = Milestone, E = Event, A = Activity, Sequence #, Description of the Activity, Event or Milestone and the approximate dates of starting and finishing an Activity. Milestone and event dates should be indicated in the date finish column. Use additional pages if required.)

Task #	MEA	Seq #	Major Milestone, Event or Activity Descripition	Date Start	Date Finish
8L1C2A80 8L1A3A84	A	1	Participate in groundfish monitoring program.	On-going	
8L1C2A80 8L1A3A84	A	2	Continue work on management simulation models.	On-going	
8L1C2A80 8L1A3A84	A	3	Participate in PFMC activities.	On-going	
8L1C2A80 8L1A3A84	M	4	Conduct survey for juvenile rockfish.	05/97	06/97
8L1C2A80 8L1A3A84	A	5	Conduct studies on validation of ageing technique.	On-going	
8L1C2A80 8L1A3A84	M	6	Conduct window rockfish assessment.	01/97	09/97
8L1C2A80 8L1A3A84	M	7	Conduct chilipepper assessment.	01/97	09/97

NOAA Marine Fisheries Service
Management Information System
Activity Summary report

Activity:	Name:	Org Code:	Activity Type:
SWC812	Groundfish Communities	FR2300	Programmatic Activity

FACILITY / LOCATION

FACILITY	NAME
SWC3	Tiburon Lab

BUDGETED AMOUNTS

LINE ITEM	PHASE	OBJECT CLASS		AMOUNT
8L1AGF80	80	11 - Personnel compensation (labor)		$157,300
8L1AGF80	80	12 - Personnel benefits		$33,700
			Sub total for Phase Class:	$191,000
			Total for Task:	$191,000
8L1C3A81	81	11 - Personnel compensation (labor)		$107,200
8L1C3A81	81	12 - Personnel benefits		$22,900
8L1C3A81	81	21 - Travel, transportation of persons		$4,000
8L1C3A81	81	24 - Printing, reproduction		$5,800
8L1C3A81	81	25 - Contracts, contractual services		$3,500
8L1C3A81	81	26 - Supplies and materials		$4,500
8L1C3A81	81	31 - Equipment, capitalized & noncap.		$5,000
			Sub total for Phase Class:	$152,900
			Total for Task:	$152,900
8L2BRS82	82	11 - Personnel compensation (labor)		$68,600
8L2BRS82	82	12 - Personnel benefits		$13,300
8L2BRS82	82	21 - Travel, transportation of persons		$6,000
8L2BRS82	82	24 - Printing, reproduction		$800
8L2BRS82	82	25 - Contracts, contractual services		$1,800
8L2BRS82	82	26 - Supplies and materials		$3,400
8L2BRS82	82	31 - Equipment, capitalized & noncap.		$4,000
			Sub total for Phase Class:	$97,900
			Total for Task:	$97,900
			Total for Activity:	$441,800

OLO

	PERCENT
Pacific coast salmon fisheries	5.00%
Pacific coast groundfish fisheries	75.00%
Nearshore fisheries	20.00%

NOAA Marine Fisheries Service
Management Information System
Activity Summary report

ASSOCIATED LEGISLATION

	PERCENT
Marine Fisheries act	

ASSOCIATED AGENCIES

AKC	Alaska Fisheries Science Center
CADFG	CALIFORNIA DEPARTMENT OF FISH AND GAME
PFMC	Pacific Fishery Management Council

ASSIGNED STAFFING

NMFS POS_ID	NMFS EMPLOYEE OR VACANT POSITION	PERCENT
0391	ADAMS, PETER	100.00%
1985	BOWERS, MICHAEL	100.00%
0459	HOBSON, EDMUND	100.00%
0463	LAIDIG, TOM	100.00%
2401	SILBERBERG, KELLY	100.00%

Total for Activity: 5 FTE's

VACANCIES
2 RES. FISH. BIOL

2

7 FTE's

SWC812

Problem Statement

Processes of natural change in the marine environment are poorly understood, and this lack of understanding seriously handicaps plans to manage the resources of this environment.

1B. Objectives (What are the major objectives being pursued by this CYOP?)

a) To identify effects of environmental change on distributions, abundances and interspecific relations of groundfishes and related species.

b) To study the role of environmental change on interannual and spatial variations in recruitment success, with emphasis on that of Sebastes spp.

c) To assess the fishery for lingcod, and perform activities that contribute to its management, including an understanding of how harvesting this apex predator affects the near-shore marine community.

Methodology

Effects of environmental change are measured at established sites near shore and on the continental shelf and slope. Emphasis is on inter-specific relations, especially between predator and prey, and on relative success of recruitment. Regular assessments are made with a variety of sampling devices and by visual observations where feasible.
Trophic relations are determined by visual observations and study of diets, with reports of results undergoing rigorous peer review. To maintain awareness of current management problems, the Investigation includes study of the fishery for lingcod and is charged with preparing the PFMC stock assessment document for that species.

Justification

This problem was addressed because it is recognized to be a weakness of many if not most fishery management plans adopted by the Pacific Fishery Management Council. The Investigation represents elements of the NOAA Strategic Plan (T1C, T3A, T3C and T3D), a legislative mandate (MFA), and the FMP for Pacific Coast groundfish.

Linkages

Activities involve collaboration with the state fisheries agencies of California, Oregon and Washington: The Santa Catalina Marine Science Center; the University of California; and other NMFS facilities, particularly Alaska Fisheries Science Center.

Contracts

No major contracts.

Products/Services

Major products are published papers, reports and stock assessment documents presented to the Pacific Fishery Management Council.

Clients

Clients include fishery managers, Pacific Fishery Management Council, researchers and others with need to understand, or have interest in, the dynamics of marine ecosystems, particularly those of the U.S. Pacific coast.

SOUTHWEST FISHERIES SCIENCE CENTER
CURRENT YEAR OPERATING PLAN - FORM 5
FY 1997

CYOP Number: SWC - 812 **Lab/Div:** Tiburon Laboratory **Page:** 1

Title: Coastal Communities Investigation

Leader: Edmund S. Hobson

MILESTONES, EVENTS AND ACTIVITIES SECTION

(For each Task # indicate M = Milestone, E = Event, A = Activity, Sequence #, Description of the Activity, Event or Milestone and the approximate dates of starting and finishing an Activity. Milestone and event dates should be indicated in the date finish column. Use additional pages if required.)

Task #	MEA	Seq #	Major Milestone, Event or Activity Descripition	Date Start	Date Finish
8L1A3A81	A	1	Assess 1997 year classes of *Sebastes* spp., based on visual counts.	05/97	09/97
"	E	2	Produce manuscript on relations between success of recruitment by *Sebastes* spp. and the diets of predators.		09/97
"	A	3	Monitor long-term changes in coastal communities.	On-going	
"	E	4	Produce Technical Memorandum on composition of California near-shore biota prior to ocean warming.		04/97
"	A	5	Analyze trophic relations, distributions, and abundances of deep-slope groundfishes.	On-going	
"	A	6	Investigate age and growth of lingcod.	On-going	
"	A	7	Coordinate port sampling of lingcod in California and Oregon.	On-going	
"	M	8	Produce lingcod stock assessment document for PFMC.		09/97

NOAA Marine Fisheries Service
Management Information System
Activity Summary report

Activity:	Name:	Org Code:	Activity Type:
SWC813	Groundfish Physiological Ecology	FR2300	Programmatic Activity

FACILITY / LOCATION

FACILITY	NAME
SWC3	Tiburon Lab

BUDGETED AMOUNTS

LINE ITEM	PHASE	OBJECT CLASS	AMOUNT
8L1C3A82	82	11 - Personnel compensation (labor)	$233,400
8L1C3A82	82	12 - Personnel benefits	$47,000
8L1C3A82	82	21 - Travel, transportation of persons	$3,000
8L1C3A82	82	24 - Printing, reproduction	$1,500
8L1C3A82	82	25 - Contracts, contractual services	$30,000
8L1C3A82	82	26 - Supplies and materials	$8,000
8L1C3A82	82	31 - Equipment, capitalized & noncap.	$7,500
		Sub total for Phase Class:	$330,400
		Total for Task:	$330,400
		Total for Activity:	$330,400

OLO

	PERCENT
Pacific coast salmon fisheries	40.00%
Pacific coast groundfish fisheries	60.00%

FMP

	PERCENT
Pacific Coast Groundfish	100.00%

ASSOCIATED LEGISLATION

	PERCENT
Endangered Species act	
Magnuson act	

ASSOCIATED AGENCIES

SWC3	Tiburon Lab

ASSIGNED STAFFING

NMFS POS_ID	NMFS EMPLOYEE OR VACANT POSITION	PERCENT
1862	ELDRIDGE, MAXWELL	100.00%

1335	JARVIS, BRIAN	100.00%
2204	MACFARLANE, ROBERT	100.00%
2447	NORTON, ELIZABETH	100.00%

Total for Activity: 4 FTE's

SWC813

Problem Statement

Fisheries managers need to understand how natural environmental factors, inherent life history traits, and management decisions can affect the persistence of fish stocks. This Task examines functional relationships between fishes and their host environments. Research consists of multidisciplinary, integrated studies designed to determine the inherent and environmental factors affecting condition and health, growth, behavior, and reproduction in important groundfishes and endangered species.

1B. Objectives (What are the major objectives being pursued by this CYOP?)

a) To understand, describe and explain how fish respond to changes in their habitats, their capacity to adapt, and the implications these interactions have for management.

b) To contribute to the assessment of groundfish stocks, evaluate their health and condition and reproductive potential, and forecast recruitment.

c) To determine the habitat utilization and the physiological adaptive capacity of outmigrating juvenile chinook salmon in the San Francisco Bay-Delta estuary.

Methodology

Studies conducted of groundfish research over the last 16 years have had their field collections completed and laboratory analyses and data compilations finished. Final data analyses and presentation of the results in peer-reviewed journals and at presentations at scientific meetings will be conducted during the current fiscal year. The studies schedules for these fora include temporal variations in adult rockfish growth, physiological condition of YOY juvenile rockfish off central California, nutritional dynamics in early life stages of shortbelly rockfish, developmental dynamics in early life stages of viviparous yellowtail rockfish, and the reproductive life history of shortbelly rockfish.

Salmon research is comprised of estuarine and coastal field surveys in the San Francisco Estuary and the Gulf of Farallones. This work is designed to collect juvenile salmonid specimens, their available food prey, and environmental data for habitat characterization. Laboratory analyses will help determine salmon physiological ecology (e.g., growth and condition, nutritional energy status, contaminant accumulation and effects, food and feeding) and habitat utilization and requirements.

Justification

Magnuson Act for groundfish research.
Endangered Species Act for salmon research.

Linkages

Northwest Fisheries Science Center and Alaska Fisheries Science Center - collaboration with triennial cruises and endangered species contaminant research.

California Department of Fish and Game - cooperative studies in San Francisco Bay-Delta estuary; contaminant research.

University of California Bodega Marine Laboratory - experimental facilities; collaborative studies with endangered species.

This CYOP is coordinated with Tiburon Lab CYOP 181.

Interagency Ecology Program - staff actively participates and coordinates research with other member agencies of IEP.

SWC813

Contracts

$12.0K for field specimen collections.
$15.0K for research vessel charter.
$ 3.0K for plankton sorting.

Products/Services

Products of this research include written scientific reports and manuscripts, presentations at scientific meetings, conferences, lectures, and seminars. Products will contribute to understanding of the causes of fishery resource variability in abundance and distribution and efficient conservation and management. Secondary outcomes are expected to provide management an efficient means to monitor health and condition of stocks, measure reproductive output, estimate recruitment potential, and predict possible effects of management decisions and environmental conditions.

Clients

Primary user of the research products are managers of the PMFC and other elements concerned with the groundfish fishery and groundfish habitat. The SWR managers and decision-makers of endangered salmon species and their habitat utilization and requirements will benefit. Other users include researchers and fishery managers who need to know what environmental and management factors influence fish growth, health, survival and reproduction.

SOUTHWEST FISHERIES SCIENCE CENTER
CURRENT YEAR OPERATING PLAN - FORM 5
FY 1997

CYOP Number: SWC - 813 **Lab/Div:** Tiburon Laboratory **Page:** 1

Title: Physiological Ecology Investigation

Leader: Maxwell B. Eldridge

MILESTONES, EVENTS AND ACTIVITIES SECTION

(For each Task # indicate M = Milestone, E = Event, A = Activity, Sequence #, Description of the Activity, Event or Milestone and the approximate dates of starting and finishing an Activity. Milestone and event dates should be indicated in the date finish column. Use additional pages if required.)

Task #	MEA	Seq #	Major Milestone, Event or Activity Decripition	Date Start	Date Finish
8L1CXXXX	A	1	Conduct field surveys of San Francisco Estuary and Gulf of Farallones for juvenile salmon, plankton, and environmental data.	02/97	10/97
"	E	2	Complete lab analyses on 1996 salmon specimens.	12/96	04/97
"	A	3	Perform associated lab analyses of 1997 specimens.	02/97	10/97
"	M	4	Make presentation at Larval Fish Conference.		06/97
"	M	5	Complete manuscripts on early life stage developmental dynamics and nutritional dynamics.		07/97
"	M	6	Make two presentation at the AFS Annual Meeting.		08/97
"	A	7	Participate as permanent members of the IEP work groups (2).	On-going	

NOAA Marine Fisheries Service
Management Information System
Activity Summary report

Activity:	Name:	Org Code:	Activity Type:
SWC821	Fishery Management Advisories	FR2300	Programmatic Activity

FACILITY / LOCATION

FACILITY	NAME
SWC3	Tiburon Lab

BUDGETED AMOUNTS

LINE ITEM	PHASE	OBJECT CLASS	AMOUNT
8L1ARA85	85	11 - Personnel compensation (labor)	$120,500
8L1ARA85	85	12 - Personnel benefits	$26,500
8L1ARA85	85	21 - Travel, transportation of persons	$5,000
8L1ARA85	85	24 - Printing, reproduction	$1,000
8L1ARA85	85	26 - Supplies and materials	$5,200
8L1ARA85	85	31 - Equipment, capitalized & noncap.	$8,000
		Sub total for Phase Class:	**$166,200**
		Total for Task:	**$166,200**
8L1C3A83	83	11 - Personnel compensation (labor)	$54,800
8L1C3A83	83	12 - Personnel benefits	$12,100
8L1C3A83	83	21 - Travel, transportation of persons	$6,200
8L1C3A83	83	23 - Rent, utilities, telecommunications	$3,500
8L1C3A83	83	24 - Printing, reproduction	$2,000
8L1C3A83	83	26 - Supplies and materials	$5,000
8L1C3A83	83	31 - Equipment, capitalized & noncap.	$3,600
		Sub total for Phase Class:	**$87,200**
		Total for Task:	**$87,200**
8L1C3A86	86	11 - Personnel compensation (labor)	$28,500
8L1C3A86	86	12 - Personnel benefits	$6,300
8L1C3A86	86	21 - Travel, transportation of persons	$1,000
8L1C3A86	86	24 - Printing, reproduction	$800
8L1C3A86	86	25 - Contracts, contractual services	$500
8L1C3A86	86	26 - Supplies and materials	$16,200
8L1C3A86	86	31 - Equipment, capitalized & noncap.	$500
		Sub total for Phase Class:	**$53,800**
		Total for Task:	**$53,800**
8L2BRS80	80	11 - Personnel compensation (labor)	$95,400
8L2BRS80	80	12 - Personnel benefits	$21,000
8L2BRS80	80	21 - Travel, transportation of persons	$4,000
8L2BRS80	80	22 - Transportation of things	$500
8L2BRS80	80	24 - Printing, reproduction	$1,400
8L2BRS80	80	25 - Contracts, contractual services	$4,900

8L2BRS80	80	26 - Supplies and materials		$27,800
8L2BRS80	80	31 - Equipment, capitalized & noncap.		$16,500
			Sub total for Phase Class:	$171,500
			Total for Task:	$171,500
8L2BRS81	81	11 - Personnel compensation (labor)		$28,000
8L2BRS81	81	12 - Personnel benefits		$5,600
8L2BRS81	81	21 - Travel, transportation of persons		$3,000
8L2BRS81	81	24 - Printing, reproduction		$400
8L2BRS81	81	25 - Contracts, contractual services		$900
8L2BRS81	81	26 - Supplies and materials		$1,700
8L2BRS81	81	31 - Equipment, capitalized & noncap.		$2,000
			Sub total for Phase Class:	$41,600
			Total for Task:	$41,600
			Total for Activity:	$520,300

OLO

	PERCENT
Pacific coast salmon fisheries	60.00%
Pacific coast and Alaska pelagic fisheries	5.00%
Pacific coast groundfish fisheries	35.00%

FMP

	PERCENT
Commercial and Recreational Salmon	50.00%
Pacific Coast Groundfish	50.00%

ASSOCIATED LEGISLATION

	PERCENT
Endangered Species act	
Magnuson act	

ASSOCIATED AGENCIES

HQ	NMFS Headquarters
NWC	Northwest Fisheries Science Center
PFMC	Pacific Fishery Management Council
SWR	Southwest Regional Office

ASSIGNED STAFFING

NMFS POS_ID	NMFS EMPLOYEE OR VACANT POSITION	PERCENT
0116	LINDLEY, STEVEN	100.00%

1000	MAC CALL, ALEC	50.00%
0021	MOHR, MICHAEL	100.00%
2457	PENN, GARETH	80.00%
1844	PRAGER, MICHAEL	100.00%
2465	THOMSON, CYNTHIA	100.00%

Total for Activity: 5.3 FTE's

SWC821

Problem Statement

Provide decision-makers with fishery and resource management advice.

1B. Objectives (What are the major objectives being pursued by this CYOP?)

a) To provide clients with timely and accurate stock/resource assessments.

b) To provide clients with timely and accurate analyses of resource behavior and evaluation of alternative actions.

c) To provide SWR with salmon information, including life cycle, models, habitat evaluations, and statistical analyses of problematic data.

Methodology

Computer modeling and statistical analysis.

Justification

Output is in direct support of FCMA and ESA, and supplies information vital to decision-making.

Linkages

Project is coordinated through PFMC, SWC and SWR to linkages with all west coast state and federal laboratories.

Contracts

UNIX computer support - 1%

Products/Services

Stock assessments, forecasts, models, statistical evaluations.

Clients

Pacific Fishery Management Council, NMFS SWFSC, NMFS SWR.

SOUTHWEST FISHERIES SCIENCE CENTER
CURRENT YEAR OPERATING PLAN - FORM 5
FY 1997

CYOP Number: SWC - 821 **Lab/Div:** Tiburon Laboratory b **Page:** 1

Title: Fishery Management Advisory

Leader: Alec D. MacCall

MILESTONES, EVENTS AND ACTIVITIES SECTION

(For each Task # indicate M = Milestone, E = Event, A = Activity, Sequence #, Description of the Activity, Event or Milestone and the approximate dates of starting and finishing an Activity. Milestone and event dates should be indicated in the date finish column. Use additional pages if required.)

Task #	MEA	Seq #	Major Milestone, Event or Activity Description	Date Start	Date Finish
8L1C3A83 8L2BER83	M	1	Complete economic analysis of Winter-Run Recovery Plan.		08/97
8L1ARA85	A	2	Support and coordinate SWFSC groundfish research as groundfish coordinator.	On-going	
"	A	3	Participate in EPA/ACOE long-term management strategy program for disposal of materials dredged from San Francisco Bay.	On-going	
"	A	4	Review fishery stock assessments and analyses.	On-going	
"	A	5	Participate on Winter-Run Chinook Recovery Team and Winter-Run Chinook Captive Breeding Committee.	On-going	
"	A	6	Participate on Klamath River Management Council's Technical Advisory Team; provide projections of run sizes and analysis of salmon management options.	On-going	
"	A	7	Maintain liaison with agencies, industry and interested groups.	On-going	
"	M	8	Co-convene workshop on estimation of extinction risk for west coast salmon populations.		11/96

"	E	9	Present paper at 2nd International Pacific Swordfish Symposium.		03/97
"	M	10	Prepare Administrative Report on revision of Klamath Harvest Rate Model.	10/96	03/97
8L2BRS80	A	11	Participate in NMFS Mass Marking Work Group.	On-going	
"	A	12	Review scientific and statistical material as appropriate for SW Region.	On-going	
"	A	13	Provide scientific advice to SW Region on population dynamics.	On-going	
"	M	14	Prepare Administrative Report on revision of the ocean harvest model for endangered winter-run chinook.	02/97	06/97
"	M	15	Complete report on methods of estimating escapement of Sacramento winter-run chinook.		01/97

Pacific Fisheries Environmental Lab

NOAA Marine Fisheries Service
Management Information System
Activity Summary report

Activity:	Name:	Org Code:	Activity Type:
SWC901	Pacific Fisheries Environmental GRP	FR2400	Programmatic Activity

FACILITY / LOCATION

FACILITY	NAME
SWC4	Monterey Lab

BUDGETED AMOUNTS

LINE ITEM	PHASE	OBJECT CLASS		AMOUNT
8L1C1C94	94	11 - Personnel compensation (labor)		$58,000
8L1C1C94	94	12 - Personnel benefits		$12,800
			Sub total for Phase Class:	**$70,800**
			Total for Task:	**$70,800**
8L1C5B90	90	11 - Personnel compensation (labor)		$143,500
8L1C5B90	90	12 - Personnel benefits		$31,600
8L1C5B90	90	21 - Travel, transportation of persons		$18,800
8L1C5B90	90	22 - Transportation of things		$2,000
8L1C5B90	90	23 - Rent, utilities, telecommunications		$42,800
8L1C5B90	90	24 - Printing, reproduction		$8,000
8L1C5B90	90	25 - Contracts, contractual services		$30,800
8L1C5B90	90	26 - Supplies and materials		$28,400
8L1C5B90	90	31 - Equipment, capitalized & noncap.		$11,800
			Sub total for Phase Class:	**$317,700**
			Total for Task:	**$317,700**
8L1C5B91	91	11 - Personnel compensation (labor)		$159,900
8L1C5B91	91	12 - Personnel benefits		$35,100
8L1C5B91	91	21 - Travel, transportation of persons		$6,000
8L1C5B91	91	24 - Printing, reproduction		$4,000
8L1C5B91	91	25 - Contracts, contractual services		$5,000
8L1C5B91	91	26 - Supplies and materials		$3,000
8L1C5B91	91	31 - Equipment, capitalized & noncap.		$2,000
			Sub total for Phase Class:	**$215,000**
			Total for Task:	**$215,000**
8L1C5B92	92	11 - Personnel compensation (labor)		$77,400
8L1C5B92	92	12 - Personnel benefits		$17,000
8L1C5B92	92	21 - Travel, transportation of persons		$2,000
8L1C5B92	92	24 - Printing, reproduction		$1,000
8L1C5B92	92	26 - Supplies and materials		$3,800
8L1C5B92	92	31 - Equipment, capitalized & noncap.		$2,200
			Sub total for Phase Class:	**$103,400**

			Total for Task:	**$103,400**
8L1C5B93	93	11 - Personnel compensation (labor)		$121,600
8L1C5B93	93	12 - Personnel benefits		$25,400
8L1C5B93	93	21 - Travel, transportation of persons		$6,000
8L1C5B93	93	24 - Printing, reproduction		$6,000
8L1C5B93	93	26 - Supplies and materials		$4,000
8L1C5B93	93	31 - Equipment, capitalized & noncap.		$3,500
			Sub total for Phase Class:	**$166,500**
			Total for Task:	**$166,500**
			Total for Activity:	**$873,400**

OLO

	PERCENT
Pacific coast salmon fisheries	30.00%
Pacific coast and Alaska pelagic fisheries	10.00%
Pacific coast groundfish fisheries	20.00%
Pacific highly migratory pelagic fisheries	10.00%
All OLO units combined	30.00%

FMP

	PERCENT
All FMPs combined	50.00%
Commercial and Recreational Salmon	~~10.00%~~ 20%
Pacific Coast Groundfish	20.00%
Western Pacific Pelagics	~~20.00%~~ 10%

ASSOCIATED LEGISLATION

	PERCENT
Endangered Species act	
Interjurisdictional Fisheries act	
Magnuson act	
Marine Fisheries act	

NOAA OBJECTIVES

N/A

		PERCENT
002	Advance Fishery predictions	50.00%

ASSOCIATED AGENCIES

CADFG	CALIFORNIA DEPARTMENT OF FISH AND GAME
NESDIS	National Environmental Satellite, Data & Info Svc
NMFS	National Marine Fisheries Service

NOAA National Oceanic and Atmospheric Administration

ASSIGNED STAFFING

NMFS POS_ID	NMFS EMPLOYEE OR VACANT POSITION	PERCENT
0849	BOEHLERT, GEORGE	100.00%
0229	LUTHY, RENE	100.00%
1186	MASON, JANET	80.00%
1593	MENDELSSOHN, ROY	100.00%
1935	NICHOLS, COLLEEN	85.00%
0481	NORTON, JERROLD	100.00%
2060	PARRISH, RICHARD	100.00%
2283	SCHWING, FRANKLIN	100.00%
0142	STROUD, ARTHUR	100.00%
2406	YOKLAVICH, MARY	100.00%

Total for Activity: **9.65 FTE's**

SWC901

Problem Statement

Natural variability in physical and biological systems interacts with effects of human actions in controlling the dynamics of fishery resource populations. The Pacific Fisheries Environmental Group conducts research to improve the understanding of causes of variability in marine ecosystems at varied time and space scales and works to apply this knowledge to practical problems in marine resources.

1B. Objectives

a) To specify linkages of environmental processes to population dynamics of important fish stocks and the ecosystems that support them.

b) To develop the means to effectively forecast effects of environmental variations (including global climate change) and oceanographic processes on availability of fish and on resilience of fish populations to exploitation.

c) To provide appropriate environmental data and information to other fishery scientists and managers

Methodology

An integrated, interdisciplinary approach addresses these problems at varying time and space scales and includes i) diagnostic studies of ecological anomalies, ii) identification of causal linkages between the environment and biological variability, and in development of fishery modelling methodology incorporating environmental factors. Environmental and biological time series are developed, verified, and evaluated. The research is international in scope.

Justification

This research program is based upon several component parts of the NOAA Strategic Plan, including Advancing Fishery Predictions, UNCED activities, Coastal Ecosystems, Recover Protected Species, and Decadal to Centennial Changes. The priority of the research is determined by its contribution to long-term improvements in understanding the role of environmental variability on marine ecosystems.

Linkages

Collaborative research is undertaken with other NMFS and NOAA scientists, including within the SWFSC and NWFSC, academic scientists, the California Department of Fish and Game, and international scientists. PFEG data products are routinely provided to NOAA scientists, including at all NMFS Centers, other government agencies, academic scientists, and international scientists. Extensive coordination with the U.S. Navy s Fleet Numerical Meteorology and Oceanography Center promotes dual use of environmental data bases.

Contracts

Contracts include computer services, janitorial services, and maintenance and represent approximately 4.1% of the PFEG budget.

Products/Services

Scientific publications and technical reports are disseminated through the scientific literature. PFEG also compiles, updates, and distributes selected environmental data products of utility to fisheries and oceanographic researchers throughout the world.

SWC901

Clients

PFEG data products are used by government, academic, and private sector researchers in support of resource- and oceanographic-related research. Scientific manuscripts are used by other researchers, government scientists and managers, regulatory agencies, and others interested in the effects of the environment on ecosystems and marine resources. PFEG works closely with the US Navy for supply of important environmental data.

SOUTHWEST FISHERIES SCIENCE CENTER
CURRENT YEAR OPERATING PLAN - FORM 5
FY 1997

CYOP Number: SWC - 901 **Lab/Div:** PFEG

Title: Fisheries Oceanography & Ecosystems

Leader: George Boehlert

MILESTONES, EVENTS AND ACTIVITIES SECTION

(For each Task # indicate M = Milestone, E = Event, A = Activity, Sequence #, Description of the Activity, Event or Milestone and the approximate dates of starting and finishing an Activity. Milestone and event dates should be indicated in the date finish column. Use additional pages if required.)

Task #	MEA	Seq #	Major Milestone, Event or Activity Description	Date Start	Date Finish
8L1C5B90	M	1	Finalize transfer of Pacific Grove facility to NOAA from the Navy.		Dec.
8L1C5B90	M	2	Publish report from Workshop on "Environmental Data Needs for Fisheries Research and Management"		March
8L1C5B90	M	3	Publish report from Workshop on "Application of acoustic tags and archival tags to assess estuarine, nearshore, and offshore habitat utilization and movement by salmonids"		Feb.
8L1C5B90	E	4	Finalize PFEG-FNMOC Annex to NOAA-Navy MOU.		Aug.
8L1C5B90	M	5	Publish NOAA Tech Memo on vertical distribution of ichthyoplankton around Oahu (with CYOP 731).		Dec.
8L1C5B90	E	6	Complete manuscript on spatial distribution of insular zooplankton around Oahu.		July
8L1C5B90	A	7	Develop multidisciplinary proposal on fisheries habitat evaluation using multibeam acoustics		Feb.
8L1C5B90	A	8	Participate in joint NWC-SWC planning for estuarine and ocean salmon research		
8L1C5B91	M	9	Publish manuscript "Analysis of deepwater rockfish assemblages and habitat in Soquel submarine canyon" describing new approaches to habitat assessment.		June

8L1C5B91	M	10	Convene west coast workshop to evaluate harvest refugia to manage, protect and conserve rockfish populations and biodiversity on the west coast (pending F/PR funding).		Aug.
8L1C5B91	M	11	Publish manuscript documenting "Changes in the sizes of rockfishes in 30 years of recreational fishing in Monterey Bay".		June
8L1C5B91	A	12	Continue research project on characterizing habitat and fish resources associated with a harvest reserve, and implications for refugia in fishery management, pending additional funding.		
8L1C5B91	E	13	Complete technical report on mapping the seafloor and ocean currents within an ecological research reserve off central CA.		March
8L1C5B91	A	14	Participate on organizational committee for 1998 Western Groundfish Conference.		Sep.
8L1C5B91	E	15	Submit paper. "Mid-latitude wind stress: The energy source for climatic regimes in the North Pacific Ocean.		March
8L1C5B92	M	16	Complete implementation and conversion of PFEG product stream from Navy computers to IT-95 system.		June
8L1C5B92	M	17	Publish book "Climate and Eastern Ocean Systems" synthesizing international studies of fishery-environment dynamics in eastern boundary current systems.		June
8L1C5B92	E	18	Publish Paper for Book on Applications of State-Space Modeling (with 8L1C5B93).		Jan.
8L1C5B92	E	19	Develop Database System for World Atlas CD Data.		Aug.
8L1C5B92	E	20	Update Database Systems to new HDF formats, and to NOAA standards for annotating gridded data.		March
8L1C5B92	A	21	Maintain PFEG IT-95 UNIX server, workstations, and LAN.		
8L1C5B92	A	22	Develop automated procedures for handling data transfers.		
8L1C5B92	E	23	Attend Oracle Administrator Course.		June
8L1C5B93	M	24	Publish manuscript "Increased upwelling in the California Current System" in Journal of Geophysical Research (w/ 8L1C5B92).		Feb.
8L1C5B93	M	25	Publish manuscript "Recent trends in the spatial variability of the SST and wind fields in the Northeast Pacific".		April
8L1C5B93	M	26	Present paper evaluating "State of the California Current" at the CalCOFI meeting.		Oct.
8L1C5B93	E	27	Publish paper on "State of the California Current" in CalCOFI.		May

8L1C5B93	A	28	Investigation of mean and time-varying mesoscale circulation off central California and its influence on groundfish recruitment (w/ Tiburon).		
8L1C5B93	A	29	Maintain and analyze CTD and ADCP data base from Tiburon groundfish surveys.		
8L1C5B93	A	30	Analysis of temporal and spatial variability of North Pacific wind, sea level, temperature and salinity (w/ 8L1C5B91, 92).		
8L1C5B93	E	31	Complete manuscript "Seasonal and interannual variability of currents and water mass characteristics in the Gulf of the Farallones".		June
8L1C5B93		32	Continue and update monthly processing and distribution of standard PFEG products and data bases, including upwelling index.		
8L1C5B93	E	33	Publish tech memos on groundfish survey hydrographic and ADCP data-- 1996 (w/ Tiburon)		Sep.
8L1C5B93	E	34	Revise and submit paper "Effects of the environment on relative first year success in rockfish" to refereed journal.		June
8L1C5B93	A	35	Collect CTD data at Granite Canyon for statistical comparison with low frequency shore station sampling.		
8L1C5B93	E	36	Complete draft Technical Memorandum detailing installation and maintenance of CTD monitor at Granite Canyon, and analysis of observations.		Sep.
8L1C5B93	A	37	Develop ocean modeling program in support of fisheries needs.		

Miscellaneous/Refundables/ Reimbursables/Add-Ons

NOAA Marine Fisheries Service
Management Information System
Activity Summary report

Activity:	Name:	Org Code:	Activity Type:
SWC100	Reimbursable/Refunds/Add-On Funds - Center Director	FR2000	Facility Management

BUDGETED AMOUNTS

LINE ITEM	PHASE	OBJECT CLASS		AMOUNT
RL1A8200	00	22 - Transportation of things		$12,000
			Sub total for Phase Class:	$12,000
			Total for Task:	$12,000
RL1AFGLJ	LJ	22 - Transportation of things		$6,000
			Sub total for Phase Class:	$6,000
			Total for Task:	$6,000
			Total for Activity:	$18,000

NOAA Marine Fisheries Service
Management Information System
Activity Summary report

Activity:	Name:	Org Code:	Activity Type:
SWC130	Coastwatch - La Jolla	FR2100	Program Management and Plan

BUDGETED AMOUNTS

LINE ITEM	PHASE	OBJECT CLASS	AMOUNT
8N2BRSLJ	00	21 - Travel, transportation of persons	$4,000
8N2BRSLJ	00	25 - Contracts, contractual services	$66,000
8N2BRSLJ	00	26 - Supplies and materials	$3,900
8N2BRSLJ	00	31 - Equipment, capitalized & noncap.	$4,800
		Sub total for Phase Class:	**$78,700**
		Total for Task:	**$78,700**
		Total for Activity:	**$78,700**

NOAA Marine Fisheries Service

Management Information System

Activity Summary report

Activity:	Name:	Org Code:	Activity Type:
SWC150	Reimbursable/Refunds/Add-On Funds - Marine Mammal Division	FR2100	Program Management and Plan

BUDGETED AMOUNTS

LINE ITEM	PHASE	OBJECT CLASS	AMOUNT
8L2BWC01	01	11 - Personnel compensation (labor)	$9,800
8L2BWC01	01	12 - Personnel benefits	$2,200
8L2BWC01	01	21 - Travel, transportation of persons	$60,000
8L2BWC01	01	25 - Contracts, contractual services	$96,000
		Sub total for Phase Class:	$168,000
		Total for Task:	$168,000
		Total for Activity:	$168,000

NOAA Marine Fisheries Service

Management Information System

Activity Summary report

Activity:	Name:	Org Code:	Activity Type:
SWC151	ESA Recovery - F/PR Funds - Marine Mammal Division	FR2100	Program Management and Plan

BUDGETED AMOUNTS

LINE ITEM	PHASE	OBJECT CLASS		AMOUNT
8L1A5M51	51	25 - Contracts, contractual services		$38,500
8L1A5M51	51	26 - Supplies and materials		$3,500
			Sub total for Phase Class:	**$42,000**
			Total for Task:	**$42,000**
8L1A5M52	52	11 - Personnel compensation (labor)		$22,400
8L1A5M52	52	12 - Personnel benefits		$4,900
8L1A5M52	52	21 - Travel, transportation of persons		$6,000
8L1A5M52	52	25 - Contracts, contractual services		$30,000
8L1A5M52	52	26 - Supplies and materials		$4,300
			Sub total for Phase Class:	**$67,600**
			Total for Task:	**$67,600**
8L1A5M53	53	26 - Supplies and materials		$1,800
8L1A5M53	53	31 - Equipment, capitalized & noncap.		$47,000
			Sub total for Phase Class:	**$48,800**
			Total for Task:	**$48,800**
8L1ASL50	50	21 - Travel, transportation of persons		$200
8L1ASL50	50	25 - Contracts, contractual services		$1,600
			Sub total for Phase Class:	**$1,800**
			Total for Task:	**$1,800**
8L2B1P50	50	11 - Personnel compensation (labor)		$68,000
8L2B1P50	50	12 - Personnel benefits		$14,900
8L2B1P50	50	21 - Travel, transportation of persons		$1,500
8L2B1P50	50	25 - Contracts, contractual services		$10,000
8L2B1P50	50	26 - Supplies and materials		$3,000
8L2B1P50	50	31 - Equipment, capitalized & noncap.		$2,500
			Sub total for Phase Class:	**$99,900**
			Total for Task:	**$99,900**
8L2B1P51	51	21 - Travel, transportation of persons		$20,000
8L2B1P51	51	24 - Printing, reproduction		$5,100
8L2B1P51	51	25 - Contracts, contractual services		$1,200
			Sub total for Phase Class:	**$26,300**
			Total for Task:	**$26,300**

8L2B1P52	52	25 - Contracts, contractual services		$47,000
8L2B1P52	52	31 - Equipment, capitalized & noncap.		$3,100
			Sub total for Phase Class:	**$50,100**
			Total for Task:	**$50,100**
8L2B1P53	53	11 - Personnel compensation (labor)		$9,000
8L2B1P53	53	12 - Personnel benefits		$1,700
8L2B1P53	53	21 - Travel, transportation of persons		$10,000
8L2B1P53	53	23 - Rent, utilities, telecommunications		$1,000
8L2B1P53	53	25 - Contracts, contractual services		$25,000
8L2B1P53	53	26 - Supplies and materials		$6,500
			Sub total for Phase Class:	**$53,200**
			Total for Task:	**$53,200**
8L2B1P54	54	11 - Personnel compensation (labor)		$57,400
8L2B1P54	54	12 - Personnel benefits		$12,600
8L2B1P54	54	25 - Contracts, contractual services		$48,000
8L2B1P54	54	26 - Supplies and materials		$22,300
			Sub total for Phase Class:	**$140,300**
			Total for Task:	**$140,300**
8L2B1P55	55	25 - Contracts, contractual services		$46,500
			Sub total for Phase Class:	**$46,500**
			Total for Task:	**$46,500**
8L2BER50	50	11 - Personnel compensation (labor)		$25,300
8L2BER50	50	12 - Personnel benefits		$5,600
8L2BER50	50	21 - Travel, transportation of persons		$20,800
8L2BER50	50	25 - Contracts, contractual services		$48,000
8L2BER50	50	26 - Supplies and materials		$21,100
8L2BER50	50	41 - Grants, subsidies		$20,000
			Sub total for Phase Class:	**$140,800**
			Total for Task:	**$140,800**
			Total for Activity:	**$717,300**

NOAA Marine Fisheries Service

Management Information System

Activity Summary report

Activity:	Name:	Org Code:	Activity Type:
SWC152	MMPA-F/PR Funds - Marine Mammal Division	FR2100	Program Management and Plan

BUDGETED AMOUNTS

LINE ITEM	PHASE	OBJECT CLASS	AMOUNT
8L1A5M50	50	11 - Personnel compensation (labor)	$171,400
8L1A5M50	50	12 - Personnel benefits	$21,800
8L1A5M50	50	21 - Travel, transportation of persons	$20,000
8L1A5M50	50	22 - Transportation of things	$5,000
8L1A5M50	50	25 - Contracts, contractual services	$59,000
8L1A5M50	50	26 - Supplies and materials	$41,700
8L1A5M50	50	31 - Equipment, capitalized & noncap.	$19,100
		Sub total for Phase Class:	$338,000
		Total for Task:	$338,000
		Total for Activity:	$338,000

NOAA Marine Fisheries Service

Management Information System

Activity Summary report

Activity:	Name:	Org Code:	Activity Type:
SWC160	AMLR Vessel Support	FR2100	Program Management and Plan

BUDGETED AMOUNTS

LINE ITEM	PHASE	OBJECT CLASS	AMOUNT
8L1A6H65	65	22 - Transportation of things	$50,000
8L1A6H65	65	25 - Contracts, contractual services	$369,700
8L1A6H65	65	26 - Supplies and materials	$26,300
8L1A6H65	65	31 - Equipment, capitalized & noncap.	$150,000
		Sub total for Phase Class:	**$596,000**
		Total for Task:	**$596,000**
		Total for Activity:	**$596,000**

NOAA Marine Fisheries Service

Management Information System

Activity Summary report

Activity:	Name:	Org Code:	Activity Type:
SWC170	Coastwatch - Honolulu	FR2200	Program Management and Plan

BUDGETED AMOUNTS

LINE ITEM	PHASE	OBJECT CLASS	AMOUNT
8N2BRSHL	00	21 - Travel, transportation of persons	$5,000
8N2BRSHL	00	23 - Rent, utilities, telecommunications	$16,000
8N2BRSHL	00	25 - Contracts, contractual services	$3,000
8N2BRSHL	00	26 - Supplies and materials	$2,000
8N2BRSHL	00	31 - Equipment, capitalized & noncap.	$4,200
8N2BRSHL	00	41 - Grants, subsidies	$70,000
		Sub total for Phase Class:	**$100,200**
		Total for Task:	**$100,200**
		Total for Activity:	**$100,200**

NOAA Marine Fisheries Service
Management Information System
Activity Summary report

Activity:	Name:	Org Code:	Activity Type:
SWC171	ESA Recovery - FPR Funds - Honolulu	FR2200	Program Management and Plan

BUDGETED AMOUNTS

LINE ITEM	PHASE	OBJECT CLASS	AMOUNT
8L2BER70	70	21 - Travel, transportation of persons	$9,000
8L2BER70	70	23 - Rent, utilities, telecommunications	$3,000
8L2BER70	70	24 - Printing, reproduction	$400
8L2BER70	70	25 - Contracts, contractual services	$87,000
8L2BER70	70	26 - Supplies and materials	$42,000
8L2BER70	70	31 - Equipment, capitalized & noncap.	$17,000
		Sub total for Phase Class:	**$158,400**
		Total for Task:	**$158,400**
8L2BER71	71	21 - Travel, transportation of persons	$11,000
8L2BER71	71	22 - Transportation of things	$2,100
8L2BER71	71	24 - Printing, reproduction	$1,800
8L2BER71	71	25 - Contracts, contractual services	$64,000
8L2BER71	71	26 - Supplies and materials	$16,500
8L2BER71	71	31 - Equipment, capitalized & noncap.	$8,000
8L2BER71	71	41 - Grants, subsidies	$45,000
		Sub total for Phase Class:	**$148,400**
		Total for Task:	**$148,400**
8L2BER72	72	21 - Travel, transportation of persons	$12,500
8L2BER72	72	26 - Supplies and materials	$1,600
		Sub total for Phase Class:	**$14,100**
		Total for Task:	**$14,100**
8L2BER73	73	21 - Travel, transportation of persons	$21,000
8L2BER73	73	23 - Rent, utilities, telecommunications	$1,100
8L2BER73	73	24 - Printing, reproduction	$2,000
8L2BER73	73	26 - Supplies and materials	$500
		Sub total for Phase Class:	**$24,600**
		Total for Task:	**$24,600**
8L2BER74	74	25 - Contracts, contractual services	$10,000
8L2BER74	74	26 - Supplies and materials	$34,000
		Sub total for Phase Class:	**$44,000**
		Total for Task:	**$44,000**
8L2BER75	75	21 - Travel, transportation of persons	$13,000
8L2BER75	75	23 - Rent, utilities, telecommunications	$20,000
8L2BER75	75	26 - Supplies and materials	$4,500

8L2BER75	75	41 - Grants, subsidies	$60,700
		Sub total for Phase Class:	**$98,200**
		Total for Task:	**$98,200**
		Total for Activity:	**$487,700**

NOAA Marine Fisheries Service
Management Information System
Activity Summary report

Activity:	Name:	Org Code:	Activity Type:
SWC173	WPACFIN	FR2200	Program Management and Plan

BUDGETED AMOUNTS

LINE ITEM	PHASE	OBJECT CLASS	AMOUNT
8L1B1NPF	PF	21 - Travel, transportation of persons	$25,000
8L1B1NPF	PF	22 - Transportation of things	$500
8L1B1NPF	PF	24 - Printing, reproduction	$1,000
8L1B1NPF	PF	25 - Contracts, contractual services	$14,000
8L1B1NPF	PF	26 - Supplies and materials	$11,500
8L1B1NPF	PF	31 - Equipment, capitalized & noncap.	$4,500
8L1B1NPF	PF	41 - Grants, subsidies	$117,500
		Sub total for Phase Class:	**$174,000**
		Total for Task:	**$174,000**
8L1C1A75	75	11 - Personnel compensation (labor)	$98,400
8L1C1A75	75	12 - Personnel benefits	$43,700
8L1C1A75	75	21 - Travel, transportation of persons	$7,500
8L1C1A75	75	25 - Contracts, contractual services	$10,000
8L1C1A75	75	26 - Supplies and materials	$19,600
8L1C1A75	75	31 - Equipment, capitalized & noncap.	$5,000
		Sub total for Phase Class:	**$184,200**
		Total for Task:	**$184,200**
		Total for Activity:	**$358,200**

ASSIGNED STAFFING

NMFS POS_ID	NMFS EMPLOYEE OR VACANT POSITION	PERCENT
0903	HAMM, DAVID	50.00%
1888	KIKKAWA, BERT	100.00%
0139	QUACH, MICHAEL	100.00%
	Total for Activity:	**2.5 FTE's**

NOAA Marine Fisheries Service
Management Information System
Activity Summary report

Activity:	Name:	Org Code:	Activity Type:
SWC180	Reimbursable/Refunds/Add-On Funds - Tiburon	FR2300	Program Management and Plan

BUDGETED AMOUNTS

LINE ITEM	PHASE	OBJECT CLASS		AMOUNT
RL1A3GMF	MF	23 - Rent, utilities, telecommunications		$50,000
			Sub total for Phase Class:	**$50,000**
			Total for Task:	**$50,000**
RL1ASFTL	TL	11 - Personnel compensation (labor)		$18,200
RL1ASFTL	TL	12 - Personnel benefits		$5,400
RL1ASFTL	TL	21 - Travel, transportation of persons		$1,500
RL1ASFTL	TL	22 - Transportation of things		$1,000
RL1ASFTL	TL	23 - Rent, utilities, telecommunications		$1,500
RL1ASFTL	TL	25 - Contracts, contractual services		$17,200
RL1ASFTL	TL	26 - Supplies and materials		$6,000
RL1ASFTL	TL	31 - Equipment, capitalized & noncap.		$30,700
			Sub total for Phase Class:	**$81,500**
			Total for Task:	**$81,500**
			Total for Activity:	**$131,500**

NOAA Marine Fisheries Service
Management Information System
Activity Summary report

Activity:	Name:	Org Code:	Activity Type:
SWC181	ESA Recovery - F/PR Funds - Tiburon	FR2300	Program Management and Plan

BUDGETED AMOUNTS

LINE ITEM	PHASE	OBJECT CLASS	AMOUNT
8L2BN180	80	21 - Travel, transportation of persons	$1,000
8L2BN180	80	22 - Transportation of things	$200
8L2BN180	80	23 - Rent, utilities, telecommunications	$200
8L2BN180	80	25 - Contracts, contractual services	$24,000
8L2BN180	80	26 - Supplies and materials	$3,400
8L2BN180	80	31 - Equipment, capitalized & noncap.	$15,600
		Sub total for Phase Class:	**$44,400**
		Total for Task:	**$44,400**
8L2BN181	81	21 - Travel, transportation of persons	$20,000
8L2BN181	81	25 - Contracts, contractual services	$51,000
8L2BN181	81	26 - Supplies and materials	$5,500
8L2BN181	81	31 - Equipment, capitalized & noncap.	$7,600
		Sub total for Phase Class:	**$84,100**
		Total for Task:	**$84,100**
8L2BN182	82	21 - Travel, transportation of persons	$5,000
8L2BN182	82	25 - Contracts, contractual services	$53,500
8L2BN182	82	26 - Supplies and materials	$5,000
8L2BN182	82	31 - Equipment, capitalized & noncap.	$2,500
		Sub total for Phase Class:	**$66,000**
		Total for Task:	**$66,000**
		Total for Activity:	**$194,500**

SPENCER, PAUL 54%

.5 FTE

NOAA Marine Fisheries Service
Management Information System
Activity Summary report

Activity:	Name:	Org Code:	Activity Type:
SWC190	Reimbursable/Refunds/Add-On Funds - PFEG	FR2400	Program Management and Plan

BUDGETED AMOUNTS

LINE ITEM	PHASE	OBJECT CLASS		AMOUNT
8N3AG190	90	22 - Transportation of things		$7,000
8N3AG190	90	24 - Printing, reproduction		$2,000
8N3AG190	90	26 - Supplies and materials		$700
8N3AG190	90	31 - Equipment, capitalized & noncap.		$3,500
			Sub total for Phase Class:	**$13,200**
			Total for Task:	**$13,200**
8N3AG191	91	24 - Printing, reproduction		$4,000
8N3AG191	91	25 - Contracts, contractual services		$46,600
8N3AG191	91	26 - Supplies and materials		$3,000
8N3AG191	91	31 - Equipment, capitalized & noncap.		$8,000
			Sub total for Phase Class:	**$61,600**
			Total for Task:	**$61,600**
			Total for Activity:	**$74,800**

NOAA Marine Fisheries Service

Management Information System

Activity Summary report

Activity:	Name:	Org Code:	Activity Type:
SWC191	ESA Recovery - F/PR Funds - PFEG	FR2400	Program Management and Plan

BUDGETED AMOUNTS

LINE ITEM	PHASE	OBJECT CLASS		AMOUNT
8L2BBAPR	PR	11 - Personnel compensation (labor)		$4,000
8L2BBAPR	PR	21 - Travel, transportation of persons		$20,000
8L2BBAPR	PR	24 - Printing, reproduction		$2,000
8L2BBAPR	PR	25 - Contracts, contractual services		$6,000
8L2BBAPR	PR	26 - Supplies and materials		$1,600
			Sub total for Phase Class:	**$33,600**
			Total for Task:	**$33,600**
8L2BN190	90	21 - Travel, transportation of persons		$6,000
8L2BN190	90	22 - Transportation of things		$1,000
8L2BN190	90	23 - Rent, utilities, telecommunications		$1,000
8L2BN190	90	24 - Printing, reproduction		$3,000
8L2BN190	90	25 - Contracts, contractual services		$30,000
8L2BN190	90	26 - Supplies and materials		$8,500
			Sub total for Phase Class:	**$49,500**
			Total for Task:	**$49,500**
8L2BRS90	90	25 - Contracts, contractual services		$30,000
			Sub total for Phase Class:	**$30,000**
			Total for Task:	**$30,000**
			Total for Activity:	**$113,100**